

PART 70 OPERATING PERMIT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
VIGO COUNTY AIR POLLUTION CONTROL

International Paper Co.
2401 Prairieton Ave.
Terre Haute, Indiana 47802

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T167-7358-00022	
Issued by: Original Signed By: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: March 22, 2004 Expiration Date: March 22, 2009

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]
- B.3 Enforceability [326 IAC 2-7-7]
- B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)][326 IAC 1-6-3]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]
- B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]
- B.16 Permit Renewal [326 IAC 2-7-4]
- B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]
- B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.20 Source Modification Requirement [326 IAC 2-7-10.5]
- B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

C SOURCE OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Opacity [326 IAC 5-1]
- C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.4 Fugitive Dust Emissions [326 IAC 6-4]
- C.5 Operation of Equipment [326 IAC 2-7-6(6)]
- C.6 Stack Height [326 IAC 1-7]
- C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-7-6(1)]

- C.8 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

- C.9 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- C.11 Maintenance of Continuous Opacity Monitoring Equipment[326 IAC 2-7-5(3)(A)(iii)][326 IAC 2-1.1-11]
[326 IAC 3-5]
- C.12 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5][326 IAC 2-7-6]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)][326 IAC 2-6]
- C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

MACT Application Submittal Requirement

- C.22 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)][40 CFR 63.56(a)][40 CFR 63.9(b)][326 IAC 2-7-12]

D.1 FACILITY OPERATION CONDITIONS - Two (2) Coal Fired Boilers

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Particulate [326 IAC 6-1-13]
- D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-3]
- D.1.3 Supplemental gas burners fuel use [326 IAC 2-2-5.5]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.5 Continuous Monitoring of Emissions [326 IAC 3-5]
- D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.1.7 Sulfur Dioxide (SO₂) Emissions and Sulfur Content [326 IAC 2-7-5(A)][326 IAC 2-7-6]
- D.1.8 Control Equipment

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.1.9 Parametric Monitoring
- D.1.10 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]
- D.1.11 Cyclone Failure Detection
- D.1.12 Continuous Opacity Monitor - Performance [326 IAC 3-5-2]
- D.1.13 Continuous Opacity Monitor - Certification [326 IAC 3-5-3]
- D.1.14 Continuous Opacity Monitor - Standard Operating Procedures [326 IAC 3-5-4]
- D.1.15 Continuous Opacity Monitor - Quality Assurance Requirements [326 IAC 3-5-5]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.16 Record Keeping Requirements
- D.1.17 Reporting Requirements - General
- D.1.18 Reporting Requirements - COM Audits [326 IAC 3-5-5(e)]
- D.1.19 Reporting Requirements - Continuous Opacity Monitoring [326 IAC 3-5-7]

D.2 FACILITY OPERATION CONDITIONS - Fluidized-Bed Reactor

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]
- D.2.2 Pulp and Paper Combustion NESHAP [326 IAC 2-7-5][40 CFR Part 63, Subpart MM]
- D.2.3 Particulate Matter (PM) [326 IAC 6-1-13]
- D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.2.6 Control Equipment

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.2.7 Visible Emissions Notations
- D.2.8 Parametric Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.2.9 Notification Requirements [326 IAC 2-7-5][40 CFR 63.867]
- D.2.10 Record Keeping Requirements
- D.2.11 Used Oil Requirements [329 IAC 13-3-2]

D.3 FACILITY OPERATION CONDITIONS - LVHC pulping system

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.3.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]
- D.3.2 Pulp and Paper Industry NESHAP [326 IAC 2-7-5][40 CFR Part 63, Subpart S]
- D.3.3 Hazardous Air Pollutant (HAP) Emissions [40 CFR 63 Subpart S]
- D.3.4 Standards for Enclosures and Closed-Vent Systems. [40 CFR 63.450]
- D.3.5 NESHAP Specified Monitoring Requirements [40 CFR 63.453]
- D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.7 Testing Procedures [326 IAC 2-7-6(1),(6)][40 CFR 63.457]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.3.8 Record Keeping Requirements [40 CFR 63.454]
- D.3.9 Reporting Requirements [40 CFR 63.455]

D.4 FACILITY OPERATION CONDITIONS - Miscellaneous Operations

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-1-2a]

Compliance Determination Requirements

- D.4.2 Particulate Matter

Certification

Emergency Occurrence Report

Quarterly Report

Quarterly Deviation and Compliance Monitoring Report

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates an integrated, semi-chemical, pulp and paper mill.

Responsible Official:	Mill Manager
Source Address:	2401 Prairieton Ave., Terre Haute, Indiana 47802
Mailing Address:	PO Box 539, Terre Haute, Indiana 47808
General Source Phone Number:	(812) 235-6688
SIC Code:	2631
County Location:	Vigo County
Source Location Status:	Maintenance Attainment for Sulfur Dioxide (SO ₂) Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1) Coal-fired chain-grate stoker steam boiler (Union Iron Works, model 18633), installed in 1941, identified as PD001, with a maximum capacity of 60,000 pounds of steam per hour output (84.38 million BTU per hour heat input), using a multiclone collector for control, and exhausting to stack/vent 001. The multiclone is being replaced by an ESP system. Once the ESP system is installed the boiler will exhaust to stack/vent 099. This boiler also has supplemental gas burners (installed in 2001), firing either natural gas or propane, with a maximum heat input capacity of 14.7 million BTU per hour, using no control and exhausting to Stack 001. This boiler can also use a small amount (less than 55 gallons) of fuel oil to assist with startup.
- (2) Coal-fired chain-grate stoker steam boiler (Babcock & Wilcox, model S9974), installed in 1956, identified as PD002, with a maximum capacity of 120,000 pounds of steam per hour output (176.99 million BTU per hour heat input), using a multiclone collector for control, and exhausting to stack/vent 001. The multiclone is being replaced by an ESP system. Once the ESP system is installed the boiler will exhaust to stack/vent 099. This boiler also has supplemental gas burners (installed in 2001), firing either natural gas or propane, with a maximum heat input capacity of 19.6 million BTU per hour, using no control and exhausting to Stack 001. This boiler can also use a small amount (less than 55 gallons) of fuel oil to assist with startup.
- (3) Spent liquor fluidized-bed recovery reactor (Dorr Oliver), installed in 1976, identified as PMET003, with a maximum capacity of 35 gallons per minute at 62% black liquor solids and a maximum supplemental fuel firing rate of 30.24 million BTU per hour, using a venturi scrubber for control, and exhausting to stack/vent 038.
- (4) Primary tank condenser (WP&M), installed in 1990, identified as PUM010, using thermal oxidizer RTO-1 for control, and exhausting to stack/vent 067.
- (5) Thermal Oxidizer ,installed in 2000, identified as RTO-1, with a minimum oxidizing zone temperature of 1600 °F, controlling emissions from the primary tank condenser (S/V 067) and the evaporator (S/V 036), and exhausting to S/V 096.

- (6) Paper machine dryer section hood exhausts (Black Clawson, model #5 Paper Machine), installed in 1967 (fans replaced in 2002), identified as PM012, with a maximum flow rate of 234,000 acf (at 180 degrees, combined flow from 4 exhausts), using no control, and exhausting to stacks/vents 031 to 034.
- (7) Pneumatic ash handling & storage system loading and unloading (United Conveyor, storage silo, truck unloading, & water shower), installed in 1956, identified as PD014, with a maximum capacity of 30 ton per day (1 truck load), using two cyclones (part of the transfer system) and a wet scrubber for control of the loading, and exhausting to stack/vent 090 for loading and ambient for unloading.
- (8) Coal storage pile, covered conveyor, coal chutes and wetting (Barber Green), installed in 1967, identified as PD015, with a maximum capacity of 6500 ton storage pile and 225 ton per day delivery rate, using no control, and exhausting to ambient (091).
- (9) Wood chip storage and handling, installed in 1961, identified as WY004, with a maximum capacity of 20,000 to 25,000 ton inventory pile, using no control, and exhausting to ambient (092).
- (10) First stage of 2-stage brown stock washer (Impco, model Z029), installed in 1961, identified as PUM003, with a maximum capacity of 300 ton per day (both stages), using no control, and exhausting to stack/vent 057.
- (11) Second stage of 2-stage brown stock washer (Impco, model Z028), installed in 1961, identified as PUM004, with a maximum capacity of 300 ton per day (both stages), using no control, and exhausting to stack/vent 056.
- (12) Wastewater treatment lagoon, identified as GEN001, using no control, and exhausting to ambient (093).
- (13) Compost product storage, identified as GEN002, using no control, and exhausting to ambient (094).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Vapor compression evaporator (Aquachem Spray Film), identified as PMET001, with a maximum capacity of 300,513 gallon per day at 1.06 specific gravity, using thermal oxidizer RTO-1 for control, and exhausting to stack/vent 036. [40 CFR 63, Subpart S]
- (2) Continuous 4-stage digester (Black Clawson Pandia), identified as PUM008, with a maximum capacity of 4 timing screws, using thermal oxidizer RTO-1 for control, and primarily exhausting to stacks/vent 067 (with pressure relief vents designated 062, 063 and 066). [40 CFR 63, Subpart S]
- (3) #1 Soda ash storage tank, identified as PMET005, with a maximum capacity of 261 tons, using fabric filters for control, and exhausting to stack/vent 042. [326 IAC 6-1-2]
- (4) #2 Soda ash storage tank, identified as PMET006, with a maximum capacity of 122 tons, using fabric filters for control, and exhausting to stack/vent 043. [326 IAC 6-1-2]
- (5) Soda ash mixing tub, identified as PMET007, with a maximum capacity of 2500 gallons, using no control, and exhausting to stack/vent 044. [326 IAC 6-1-2]
- (6) Pulp chip cyclone, identified as PUM009, with a maximum capacity of 12,000 cfm and 600 ton per day, and exhausting to stack/vent 064. [326 IAC 6-1-2]
- (7) Chip cyclone, identified as WY001, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stack/vent 072. [326 IAC 6-1-2]

- (8) Chip screening room, identified as WY002, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stacks/vents 073 & 074. [326 IAC 6-1-2]
- (9) Chip silo cyclone, identified as WY003, with a maximum capacity of 600 ton per day chips, using no control, and exhausting to stack/vent 075. [326 IAC 6-1-2]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, VCAPC, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by Vigo County Air Pollution Control (VCAPC).

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ and VCAPC, within a reasonable time, any information that IDEM, OAQ and VCAPC, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ and VCAPC, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ and VCAPC, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ and VCAPC, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ and VCAPC, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and VCAPC. IDEM, OAQ and VCAPC, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- d. To the extent the Permittee is required by 40 CFR 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and VCAPC, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

VCAPC

Telephone Number: 812-462-3433
Facsimile Number: 812-462-3447

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ and VCAPC, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ and VCAPC, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ and VCAPC have made the following determination regarding this source:
 - (1) PD001 (Boiler #1) and PD002 (Boiler #4) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40b, Subpart Db), because of date of construction. The Subpart only regulates units constructed after June 19, 1984. PD001 was constructed in 1941 and PD002 was constructed in 1956. Additionally, they are not subject to any of the other subpart D sections because of size.
 - (2) AF004, and AF005 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb), because of date of construction. The Subpart only regulates tanks constructed after July 23, 1984 and all these tanks were installed in 1980 or before.
 - (3) PD013, AF012, AF013, PM019, PM022, PMET002, PMET016, PMET017, PMET018, PMET019, PMET020, PMET021, NSR005, TB001, TB002, TB003, M-07, M-20, and M-21 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb), because of the tank's capacity. Subpart Kb only regulates tanks with capacities of 40 cubic meters (equal to 10,567 gallons) or more.
 - (4) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart BB), because the operation is not a Kraft Mill.
 - (5) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.250, Subpart Y), because the operation does not fit the definition of a coal preparation plant and because the operation was constructed prior to the October 24, 1974 applicability date.
 - (6) This source does not contain any facilities subject to requirements under the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61. These standards regulate emissions of selected pollutants, such as benzene and vinyl chloride. Since International Paper does not utilize

any of the listed compounds they are not subject to these regulations.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ or VCAPC, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ or VCAPC, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ or VCAPC, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)]
[326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or VCAPC, determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ or VCAPC, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ or VCAPC, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or VCAPC, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and VCAPC, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal

application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.

(2) If IDEM, OAQ and VCAPC, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ and VCAPC, take final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and VCAPC, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ and VCAPC, fail to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation, or removal of a nonroad engine, as defines in 40 CFR 89.2.

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and VCAPC, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, VCAPC, and U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ and VCAPC, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ or VCAPC, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least

twenty percent (20%); or

- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods

specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ and VCAPC.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ and VCAPC of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and VCAPC, if the source submits to IDEM, OAQ and VCAPC, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)][326 IAC 2-1.1-11][326 IAC 3-5]

- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COM shall be in operation at all times that the induced draft fan is in operation.
- (b) All continuous opacity monitoring systems shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the time and reason of the breakdown and efforts made to correct the problem.
- (d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, compliance with the applicable opacity limits shall be demonstrated by the following:
 - (1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading.
 - (A) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.
 - (C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.
 - (2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor the emissions from the emission unit stack.
 - (A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
 - (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.
 - (C) Method 9 readings may be discontinued once a COM is online.

- (D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (3) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 326 IAC 5-1.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of any other operating parameter, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ and VCAPC approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ and VCAPC, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ and VCAPC, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68 is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

This source does not currently contain any facilities subject to requirements (as of this initial Part 70 issuance date) under the Chemical Accident Prevention Provisions, 40 CFR Part 68. These requirements apply to companies that use or store greater than specified thresholds of certain hazardous compounds, and are aimed at risk assessment and accident prevention. International Paper does not have any of those compounds in greater than the applicable threshold amount, and are therefore not subject to these regulations.

The Permittee shall apply for a Significant Permit Modification prior to any change that would make Part 68 applicable.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ and VCAPC upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance

Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

- (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ and VCAPC shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and VCAPC, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ and VCAPC that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ and VCAPC may extend the retesting deadline.
- (c) IDEM, OAQ and VCAPC reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (“Regulated pollutant which is used only for purposes of Section 19 of this rule”) from the source, for purposes of Part 70 fee assessment.

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre haute, Indiana 47807

The emission statement does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Vigo County Air Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Vigo County Air Pollution Control within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the

deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Part 2 MACT Application Submittal Requirement

C.22 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]

-
- (a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).
- (b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the

Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:

- (1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;
 - (2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or
 - (3) The MACT standard or standards for the affected source categories included at the source are promulgated.
- (c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (1) Coal-fired chain-grate stoker steam boiler (Union Iron Works, model 18633), installed in 1941, identified as PD001, with a maximum capacity of 60,000 pounds of steam per hour output (84.38 million BTU per hour heat input), using a multiclone collector for control, and exhausting to stack/vent 001. The multiclone is being replaced by an ESP system. Once the ESP system is installed the boiler will exhaust to stack/vent 099. This boiler also has supplemental gas burners (installed in 2001), firing either natural gas or propane, with a maximum heat input capacity of 14.7 million BTU per hour, using no control and exhausting to Stack 001. This boiler can also use a small amount (less than 55 gallons) of fuel oil to assist with startup.
- (2) Coal-fired chain-grate stoker steam boiler (Babcock & Wilcox, model S9974), installed in 1956, identified as PD002, with a maximum capacity of 120,000 pounds of steam per hour output (176.99 million BTU per hour heat input), using a multiclone collector for control, and exhausting to stack/vent 001. The multiclone is being replaced by an ESP system. Once the ESP system is installed the boiler will exhaust to stack/vent 099. This boiler also has supplemental gas burners (installed in 2001), firing either natural gas or propane, with a maximum heat input capacity of 19.6 million BTU per hour, using no control and exhausting to Stack 001. This boiler can also use a small amount (less than 55 gallons) of fuel oil to assist with startup.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-13]

Pursuant to 326 IAC 6-1-13, PD001 and PD002 are limited to 0.35 pounds of particulate matter per million BTU combined. PD001 and PD002 are also limited to a combined total of 483.8 tons of particulate matter per year.

D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-3]

Pursuant to 326 IAC 7-4-3 (SO₂ Emissions Limitations) the SO₂ emissions from PD001 and PD002 shall not exceed 4.09 pounds per MMBtu heat input.

D.1.3 Supplemental gas burners fuel use [326 IAC 2-2-5.5]

The supplemental gas burners shall only combust either natural gas or propane.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.5 Continuous Monitoring of Emissions [326 IAC 3-5]

Pursuant to 326 IAC 3-5-1(c)(2)(A), the Permittee shall continuously monitor either stack/vent 001 or stack/vent 099 (whichever is actively directing the exhaust gas stream) for opacity emissions whenever either PD001 or PD002 is in operation.

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 6 and 12 months after issuance of this permit or within 6 months of installation of the ESP whichever comes first, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM testing on emissions from PD001 and PD002 combined, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2 ½) years from the date of this valid compliance

demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.7 Sulfur Dioxide (SO₂) Emissions and Sulfur Content [326 IAC 2-7-5(A)][326 IAC 2-7-6]

Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed 4.09 pounds per million BTU. Compliance shall be determined utilizing one of the following options:

- (a) Coal sampling and analysis shall be performed using one of the following procedures:
 - (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
 - (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
 - (C) Minimum sample size shall be five hundred (500) grams;
 - (D) Samples shall be composited and analyzed at the end of each calendar month;
 - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or
 - (2) Sample and analyze the coal pursuant to 326 IAC 3-7-2(a);
 - (3) Sample and analyze the coal pursuant to 236 IAC 3-7-3; or
- (b) Upon written notification to IDEM and VCAPC by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7-2. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(e)]
- (c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

A determination of noncompliance pursuant to any of the methods specified in (a), (b), or (c) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.8 Control Equipment

- (a) The multiclone controlling PM emissions from PD001 shall be in operation at all times that PD001 is in operation. This multiclone shall be inspected at least once per year. (Until replaced by ESP, then refer to (c) below)
- (b) The multiclone controlling PM emissions from PD002 shall be in operation at all times that PD002 is in operation. This multiclone shall be inspected at least once per year. (Until replaced by ESP, then refer to (c) below)
- (c) Once installed, except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator (ESP) shall be operated at all times that the boilers vented to the ESP are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the multiclone controlling PD001, at least once per shift when the boiler is in operation. When for any one reading, the pressure drop across the multiclone is outside the normal range of 5.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. Once the multiclone is replaced by the ESP system, this condition is replaced by D.1.11 below.
- (b) The Permittee shall record the total static pressure drop across the multiclone controlling PD002, at least once per shift when the boiler is in operation. When for any one reading, the pressure drop across the multiclone is outside the normal range of 1.5 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. Once the multiclone is replaced by the ESP system, this condition is replaced by D.1.11 below.
- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and VCAPC, and shall be calibrated at least once every six (6) months.

D.1.10 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is in operation, by measuring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.
- (b) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below 50 percent (50%). T-R set failure resulting in less than 50 percent (50%)* availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.11 Cyclone Failure Detection

In the event that cyclone failure (until replaced by ESP) has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.12 Continuous Opacity Monitor - Performance [326 IAC 3-5-2]

- (a) Performance specifications set forth in 40 CFR 60 Appendix B, shall be used to certify monitoring equipment installed pursuant to this rule; however, where reference is made to the administrator in 40 CFR 60, Appendix B, the term "department" shall be inserted for purposes of this rule.
- (b) The cycling time for the opacity monitor shall not exceed ten (10) seconds. The cycling time is the total time a monitoring system requires to sample, analyze, and record an emission measurement.
- (c) Since the two boilers (PD001 and PD002) share an exhaust stack, the Permittee may either:
 - (1) install a continuous opacity monitoring system on the combine effluent; or
 - (2) install a continuous opacity monitoring system comprised of, and capable of combining the signals

from, component transmissometers on each effluent stream.

- (d) Instrument full-scale response or upper limit of concentration measurement range for all opacity monitoring systems shall be set at one hundred percent (100%) opacity if possible.
- (e) Locations for installing continuous monitoring systems or monitoring devices that vary from locations provided under the performance specifications of 40 CFR 60, Appendix B, shall be approved by the IDEM, OAQ, VCAPC, and the US EPA upon a demonstration by the owner or operator that installation at alternative locations will enable accurate and representative measurements.
- (f) Owners or operators of affected facilities shall conduct continuous emission monitoring system performance evaluations, upon the request of the IDEM, OAQ and VCAPC, to demonstrate continuing compliance of the continuous emission monitoring systems according to the specifications in 326 IAC 3-5-2(7)(A), (B) and (C).

D.1.13 Continuous Opacity Monitor - Certification [326 IAC 3-5-3]

- (a) The owner or operator shall conduct the applicable performance specifications tests in accordance with the procedures specified in 40 CFR 60, or other applicable federal regulations, for the required monitoring system as follows:
 - (1) Not later than one hundred eighty (180) days after a facility start-up or initial monitor installation date.
 - (2) Not later than forty-five (45) unit operating days after monitor replacement date, or significant monitor repair as described in IDEM's Quality Assurance Manual, Chapter 20 (dated June 20, 1997), which affects the ability of the analyzer to function date.
- (b) No less than fourteen (14) days in advance of the start of continuous opacity monitor (COM) certification the Permittee shall notify the IDEM, OAQ and VCAPC.
- (c) The Permittee shall submit all the required test data and information in the form of a written report to the IDEM, OAQ and VCAPC for review and approval within forty-five (45) days of completion of the performance specification test.
- (d) The IDEM, OAQ and VCAPC shall issue a written notice of certification status upon review of the compliance certification test report. A required monitoring system is certified when the department issues a certification letter stating that the applicable components, has satisfactorily met all federal and state monitoring requirements.
- (e) The IDEM, OAQ and VCAPC may decertify a required monitoring system if an audit or performance evaluation reveals that such monitoring system or a component thereof does not meet applicable performance specifications or requirements. The owner or operator shall repeat the certification process for the required monitoring system within forty-five (45) days of the date of the department's decertification of the required monitoring system.

D.1.14 Continuous Opacity Monitor - Standard Operating Procedures [326 IAC 3-5-4]

- (a) The Permittee shall submit to the IDEM, OAQ and VCAPC a complete, written continuous monitoring standard operating procedures (SOP) within ninety (90) days after monitor installation. If revisions are made to the SOP, updates shall be submitted to IDEM, OAQ and VCAPC biennially. As a minimum the SOP shall contain complete step-by-step procedures as outlined in 326 IAC 3-5-4(a)(1) through (10).
- (b) If the Permittee fails to submit, or submits an SOP that fails to address the factors provided in (a) above, then IDEM, OAQ and VCAPC may require a performance evaluation.

D.1.15 Continuous Opacity Monitor - Quality Assurance Requirements [326 IAC 3-5-5]

- (a) For calibration drift (CD) assessment, the COMS shall be checked at least once daily. The CD shall be quantified and recorded at zero (0) (or low level) and upscale level opacity. The COMS shall be adjusted

whenever the CD exceeds the specification of 40 CFR 60, Appendix B, Performance Specification 1 (PS-1), and the COMS shall be declared out of control when the CD exceeds twice the specification of PS-1. Corrective actions, followed by a validating CD assessment, are required when the COMS is out of control.

- (b) For fault indicators assessment, the fault lamp indicators, data acquisition system error messages, and other system self-diagnostic indicators shall be checked at least daily. Appropriate corrective actions shall be taken when the COMS is operating outside the preset limits.
- (c) For performance audits, checks of the individual COMS components and factors affecting the accuracy of the monitoring data, as described in this subdivision, shall be conducted, at a minimum, on a calendar quarter basis. The absolute minimum checks included in the performance audit are as follows:
 - (1) The status of the optical alignment of the monitor components shall be checked and recorded according to the procedure specified by the monitor manufacturer. Monitor components must be realigned as necessary.
 - (2) The apparent effluent opacity shall be compared and recorded before and after cleaning each of the exposed optical surfaces. The total optical surface dust accumulation shall be determined by summing up the apparent reductions in opacity for all of the optical surfaces that are cleaned. Caution must be employed in performing this check since fluctuations in effluent opacity occurring during the cleaning cycle may adversely affect the results.
 - (3) The zero (0) and upscale response errors shall be determined and recorded according to the CD procedures. The errors are defined as the differences (in percent opacity) between the correct value and the observed value for the zero (0) and high level calibration checks.
 - (4) The value of the zero (0) compensation applied at the time of the audit shall be calculated as equivalent opacity, corrected to stack exit conditions, according to the procedures specified by the manufacturer. The compensation applied to the effluent recorded by the monitor system shall be recorded.
 - (5) The optical pathlength correction ratio (OPLR) shall be computed from the monitor pathlength and stack exit diameter and shall be compared, and the difference recorded, to the monitor setup OPLR value. The stack exit correlation error shall be determined as the absolute value of the difference between the measured value and the corrected value, expressed as a percentage of the correct value.
 - (6) A three-point calibration error test of the COMS shall be conducted. Three (3) neutral density filters meeting the requirements of PS-1 shall be placed in the COMS light beam path. The monitor response shall be independently recorded from the COMS permanent data recorder. Make a total of five (5) nonconsecutive readings for each filter. The low-range, mid-range, and high-range calibration error results shall be computed as the mean difference and ninety-five percent (95%) confidence interval for the difference between the expected and the actual responses of the monitor as corrected to stack exit conditions. These values shall be calculated using the procedure of PS-1, Section 8.0. The following are requirements for these values:
 - (A) The calibration error test required the installation of an external calibration audit device (zero-jig). The zero-jig shall be adjusted to provide the same zero (0) response as the monitor's simulated zero (0).
 - (B) Use calibration attenuators, that is, neutral density filters or screens, with values that have been determined according to PS-1, Section 7.1.3, "Attenuator Calibration", and produce simulated opacities (as corrected to stack exit conditions) in the ranges listed in Table 1-2 in PS-1.
 - (C) The stability of the attenuator values shall be checked at least once per year according to the procedures specified in PS-1. The attenuators shall be recalibrated if the stability checks indicate a change of 2% opacity or greater.
- (d) The following are requirements for monitor acceptance criteria:
 - (1) The following criteria are to be used for determining if the COMS audit results are acceptable:

Stack Exit Correlation Factor	? 2 percent
Zero and Upscale Responses	? 2 percent opacity
Zero Compensation	? 4 percent opacity

- | | | |
|--|-----------------------------------|---------------------|
| | Optical Alignment | Misalignment error |
| | | ? 2 percent opacity |
| | Optical Surface Dust Accumulation | ? 4 percent opacity |
| | Calibration Error | ? 3 percent opacity |
- (2) The COMS is out of control whenever the results of a quarterly performance audit indicate noncompliance with any of the performance assessment criteria above. If the COMS is out of control, the owner or operator must take the action necessary to eliminate the problem. Following corrective action, the source owner or operator must reconduct the appropriate failed portion of the audit and other applicable portions to determine whether the COMS is operating properly and within specifications. The COMS owner or operator shall record both audit results showing the COMS to be out of control and the results following the corrective action. COMS data obtained during any out of control period may not be used for compliance determination; the data may be used for identifying periods where there has been a failure to meet quality assurance and control criteria.
- (3) Repeated audit failures, that is, out of control conditions resulting from the quarterly audits, indicate that the QC procedures are inadequate or the COMS is incapable of providing quality data. The source owner or operator shall increase the frequency of the above QC procedures until the performance criteria are maintained or modify or replace the COMS whenever two (2) consecutive quarters of unacceptable performance occur.
- (e) The performance audit calculations contained in PS-1

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.16 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.2 and D.1.7, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the Sulfur Dioxide (SO₂) emission limit established in Condition D.1.2 and D.1.7.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual coal usage since last compliance determination period;
 - (3) Sulfur content, heat content, and ash content (as received basis);
 - (4) Sulfur Dioxide emission rates;
- (b) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity greater than or equal to one hundred (100) million BTU per hour actual heat input shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ and VCAPC.
- (c) To document compliance with Condition D.1.9, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken weekly and shall be complete and sufficient to establish compliance with the monitoring requirements established in Condition D.1.9.
- (1) Date and time of each reading;
 - (2) Actual pressure drop reading, along with a notation indicating if the reading is in the acceptable range; and
- (d) To document compliance with the inspection provisions in Conditions D.1.8 and D.1.9, the Permittee shall maintain records including the date of the inspection, the findings of the inspection, and any PMP or CRP related actions as a result of the inspection.
- (e) To document compliance with Conditions D.1.12, D.1.13, D.1.14, and D.1.15, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the monitoring requirements established in Conditions D.1.12, D.1.13, D.1.14 and D.1.15.
- (1) On and after the certification of a monitoring system, the owner or operator of a source subject to

this rule shall maintain records, including raw data, of all monitoring data and supporting information for a minimum of five (5) years from the date of the following:

- (A) A monitoring sample.
 - (B) A measurement.
 - (C) A test.
 - (D) A certification.
 - (E) A report.
 - (F) Any other activity required under this article.
- (2) The records described in subsection (a) shall include the following:
- (A) All documentation relating to:
 - (i) design, installation, and testing of all elements of the monitoring system; and
 - (ii) required corrective action or compliance plan activities.
 - (B) All maintenance logs, calibration checks, and other required quality assurance activities.
 - (C) All records of corrective and preventive action.
 - (D) A log of plant operations, including the following:
 - (i) Date of facility downtime.
 - (ii) Time of commencement and completion of each downtime.
 - (iii) reason for each downtime.
- (3) The owner or operator of a source subject to this rule shall maintain the records required by this section at the source, or at such other site, in a manner so that they may be inspected by the IDEM, OAQ, VCAPC or the US EPA, if so requested or required.
- (f) To document compliance with Section C - Opacity and Conditions D.1.1, D.1.9 and D.1.10, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and in Conditions D.1.1, D.1.9 and D.1.10.
- (1) Data and results from the most recent stack test.
 - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5.
 - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken during any periods of COM downtime.
 - (4) All ESP and multiclone parametric monitoring readings.
- (g) The Permittee shall maintain records of the results of all boiler and emission control equipment inspections.
- (h) Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 Reporting Requirements - General

A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

D.1.18 Reporting Requirements - COM audits [326 IAC 3-5-5(e)]

Pursuant to 326 IAC 3-5-5(e) reporting requirements for performance audits on the continuous opacity monitoring system are as follows:

- (a) Owners or operators of facilities required to conduct continuous opacity monitor calibration error audits on continuous emission monitors shall prepare a written report of the results of the performance audit for each

calendar quarter. Quarterly reports shall be submitted to the IDEM, OAQ and VCAPC within thirty (30) calendar days after the end of each quarter.

- (b) The performance audit report shall contain the following information:
 - (1) Plant and monitor information, including the following:
 - (A) The plant name and address.
 - (B) The monitor brand, model, and serial number.
 - (C) The monitor span.
 - (D) The monitor location, for example, duct, boiler, unit, or stack designation.
 - (2) Performance audit information, including the following:
 - (A) The auditor's name.
 - (B) A copy of the audit standard's certification, for example, the vendor's Protocol 1 certification, or neutral density filter certification.
 - (C) All data used to calculate the audit results.
 - (D) The audit results and an indication if the monitor passed or failed the audit. If the performance audit results show the CEMS or COMS to be out of control, the CEMS or COMS owner or operator must report both the audit results showing the CEMS or COMS to be out of control and the results of the audit following the corrective action showing the COMS to be operating within specification.
 - (E) Any corrective actions performed as the result of a failed audit.

D.1.19 Reporting Requirements - Continuous Opacity Monitoring [326 IAC 3-5-7]

Pursuant to 326 IAC 3-5-7(Reporting requirements) the following reporting requirements apply to sources subject to this rule:

- (a) Excess emissions shall be reported no less frequently than quarterly. For sources required to report quarterly, such reports shall be:
 - (1) submitted by the Permittee to the IDEM, OAQ and VCAPC; and
 - (2) postmarked or delivered by other means no later than thirty (30) calendar days following the last day of the reporting period.
- (b) The monitoring report shall contain the following continuous monitoring information summaries, with all times reported in real time.
 - (1) Monitored facility operation time during the reporting period:
 - (2) Excess emissions or parameters, as applicable, reported in units of the standard, or the applicable parameter unit as follows:
 - (A) Date of excess emissions, or other applicable dates.
 - (B) Time of commencement and completion for each applicable parameter deviation or excess emission data.
 - (3) Magnitude of each excess emission as follows:
 - (A) The actual percent opacity of all six (6) minute (block) averages exceeding the applicable opacity limit shall be reported. If the exceedance occurs continuously beyond one (1) six (6) minute period, the percent opacity for each six (6) minute average or the highest six (6) minute average opacity for the entire period shall be reported.
 - (B) A summary by cause shall be prepared and submitted as part of this report itemizing exceedances by cause.
- (c) Continuous monitoring system instrument downtime except for zero (0) and span checks, which shall be reported separately, shall include the following:
 - (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of systems repairs and adjustments.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Spent liquor fluidized-bed recovery reactor (Dorr Oliver), installed in 1976, identified as PMET003, with a maximum capacity of 35 gallons per minute at 62% black liquor solids and a maximum supplemental fuel firing rate of 30.24 million BTU per hour, using a venturi scrubber for control, and exhausting to stack/vent 038.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart MM.

D.2.2 Pulp and Paper Combustion NESHAP [326 IAC 2-7-5][40 CFR Part 63, Subpart MM]

PMET003 (Spent liquor fluidized-bed reactor) is subject to the National Emission Standard Hazardous Air Pollutants, 40 CFR 63, Subpart MM and shall be in compliance with all applicable provisions of this rule no later than March 13, 2004. The Pulp and Paper Recovery Combustion NESHAP consists of the following sections:

- 63.860 Applicability and designation of affected source
- 63.861 Definitions
- 63.862 Standards
- 63.863 Compliance dates
- 63.864 Monitoring requirements
- 63.865 Performance test requirements and test methods
- 63.866 Recordkeeping requirements
- 63.867 Reporting requirements
- 63.868 Delegation of authority
- Appendix to Subpart MM - Table

Before the Permittee initiates specific equipment or operational changes to comply with this NESHAP they must apply for and obtain a Significant Permit Modification. This modification will reopen this section and spell out the specific applicable requirements for the chosen compliance method.

D.2.3 Particulate Matter (PM) [326 IAC 6-1-13]

Pursuant to 326 IAC 6-1-13, PMET003 is limited 71 pounds of particulate matter per hour. PMET003 is also limited to a total of 311.0 tons of particulate matter per year.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 6 and 12 months after issuance of this permit, in order to demonstrate compliance with Condition D.2.3, the Permittee shall perform PM testing on emissions from PMET003, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.2.6 Control Equipment

The venturi scrubber (with mist elimination) controlling PM emissions from PMET003 shall be in operation at all

times that PMET003 is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.7 Visible Emissions Notations

- (a) Visible emission notations of the PMET003 stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.2.8 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the venturi scrubber used in conjunction with the recovery reactor, at least once per shift when the recovery reactor is in operation. When for any one reading, the pressure drop across the venturi scrubber is below the normal minimum reading of 36.5 inches of water or a minimum reading established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The Permittee shall record the static pressure of both the water and liquor flow to the scrubber at least once per shift when the recovery reactor is in operation. When for any one reading, the static water pressure to the venturi scrubber and scrubber trays is below the minimum readings of 2.5 psi in the water line and 30 psi in the liquor line or a minimum reading established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ and VCAPC, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Notification Requirements [326 IAC 2-7-5][40 CFR 63.867]

The Permittee shall comply with all reporting provisions specified in 40 CFR Part 63, Subpart MM, and in particular:

- (a) The Permittee shall submit an initial notification in accordance with 40 CFR 63.9(b) (Subpart A, General Provisions) within 120 days after promulgation of this NESHAP. In 40 CFR 63.9(b)(b), the Permittee is

required to provide the following information: Initial notification submitted on July 11, 2001.

- (1) The name and address of the Permittee;
 - (2) The address (i.e. physical location) of the affected source;
 - (3) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
 - (4) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and
 - (5) A statement of whether the affected source is a major source or an area source.
- (b) The Permittee shall submit a notification of compliance status report no later than 180 days after the compliance date, which is March 13, 2004. The notification of compliance status report shall contain all the information required in 40 CFR 63.867 that is appropriate for the facility.
- (c) On or before the date that the notification of compliance status report is due, the Permittee shall submit an application for a significant permit modification in accordance with 326 IAC 2-7-12 that includes the information necessary to determine how the source will comply or is complying with 40 CFR 63, Subpart MM.
- (d) The reports required in (a) and (b) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

And

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

D.2.10 Record Keeping Requirements

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- (a) To document compliance with Condition D.2.7, the Permittee shall maintain records of visible emission notations of the recovery reactor stack exhaust once per shift.
- (b) To document compliance with Condition D.2.8, the Permittee shall maintain the following:
- (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Pressure drop across the venturi scrubber;
 - (B) static pressure in the water line; and
 - (C) static pressure in the liquor line.

- (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.11 Used Oil Requirements [329 IAC 13-3-2]

The used oil burned in the recovery reactor shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

- (a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),
- (b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and
- (c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (1) Primary tank condenser (WP&M), installed in 1990, identified as PUM010, using thermal oxidizer RTO-1 for control, and exhausting to stack/vent 067.
- (2) Vapor compression evaporator (Aquachem Spray Film), identified as PMET001, with a maximum capacity of 300,513 gallon per day at 1.06 specific gravity, using thermal oxidizer RTO-1 for control, and exhausting to stack/vent 036.[40 CFR 63, Subpart S]
- (3) Continuous 4-stage digester (Black Clawson Pandia), identified as PUM008, with a maximum capacity of 4 timing screws, using thermal oxidizer RTO-1 for control, and primarily exhausting to stacks/vent 067 (with pressure relief vents designated 062, 063 and 066). [40 CFR 63, Subpart S]
- (4) Thermal Oxidizer ,installed in 2000, identified as RTO-1, with a minimum oxidizing zone temperature of 1600 ?F, controlling emissions from the primary tank condenser (S/V 067) and the evaporator (S/V 036), and exhausting to S/V 096.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart S.

D.3.2 Pulp and Paper Industry NESHAP [326 IAC 2-7-5][40 CFR Part 63, Subpart S]

The Primary Tank Condenser (PUM010), Vapor Compression Evaporator (PMET001), and Continuous 4-Stage Digester (PUM008) are all subject to 40 CFR Part 63, Subpart S. A copy of the rule is attached.

D.3.3 Hazardous Air Pollutant (HAP) Emissions [40 CFR 63 Subpart S]

Pursuant to 40 CFR 63.443(b)(1), the HAP emissions from the Low Volume High Concentration (LVHC) system at existing semi-chemical pulp mills shall be controlled. LVHC system is defined by the subpart to be: the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

- (a) The LVHC system shall be enclosed and vented into a closed-vent system and routed to a control device to reduce total HAP emissions. The enclosures and closed-vent system shall meet the requirements specified in Condition D.3.4. The thermal oxidizer shall meet the following minimum requirements: Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 ?C (1600 ?F) and a minimum residence time of 0.75 seconds.
- (b) Reported periods of excess emissions shall not be a violation provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed one percent for control devices used to reduce the total HAP emissions from the LVHC system.

D.3.4 Standards for Enclosures and Closed-Vent Systems. [40 CFR 63.450]

Each enclosure and closed-vent system specified in condition D.3.3 for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (a) through (c) below

- (a) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in Condition D.3.6(d).
- (b) Each component of the closed-vent system used to comply with Condition D.3.3 that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in Condition D.3.7.
- (c) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in Condition D.3.3 shall comply with either of the following requirements:
 - (1) On each bypass line, the Permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or
 - (2) For bypass line valves that are not computer controlled, the Permittee shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

D.3.5 NESHAP Specified Monitoring Requirements [40 CFR 63.453]

- (a) The Permittee shall install, calibrate, certify, operate and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in 40 CFR 63.2) as specified in paragraphs (b) through (f) of this condition. The CMS shall include a continuous recorder.
- (b) A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer.
- (c) Each enclosure and closed-vent system used to comply with Condition D.3.4 shall comply with the requirements specified below:
 - (1) For each enclosure opening, a visual inspection of the closure mechanism specified in Condition D.3.4 shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.
 - (2) Each closed-vent system required by Condition D.3.4 shall be visually inspected every 30 days and at other times as requested by IDEM, OAQ and VCAPC. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects. [See custom schedule below]

On August 20, 2001, International Paper was issued a custom schedule for 40 CFR 63.453(k)(2) and (k)(5) by the USEPA, Region V. This custom schedule allows for a more flexible schedule on these required inspections, provided they still meet this criteria: "Inspections must be performed once during the calendar month, with at least 21 days elapsed time between inspections."

- (3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in Condition D.3.4 measured initially and annually by the procedures in Condition D.3.7.
- (4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in Condition D.3.7.
- (5) The valve or closure mechanism specified in Condition D.3.4 shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line. [See custom schedule below]

On August 20, 2001, International Paper was issued a custom schedule for 40 CFR 63.453(k)(2) and (k)(5) by the USEPA, Region V. This custom schedule allows for a more flexible schedule on these required inspections, provided they still meet this criteria: "Inspections must be performed once during the calendar month, with at least 21 days elapsed time between inspections."

- (6) If an inspection required by (c)(1) through (c)(5) of this condition identifies visible defects in ductwork, piping, enclosures or connections to covers required by Condition D.3.4, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.
 - (A) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.
 - (B) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified.
- (d) If the Permittee uses a control device to comply with Condition D.3.3 shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under paragraphs (a) through (c) of this condition. Except as provided in Condition D.3.3, operation of the control device below the minimum operating parameter values or above the maximum operating parameter values established under these conditions or failure to perform procedures required by these conditions shall constitute a violation of the applicable emission standard and be reported as a period of excess emissions.

D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.7 Testing Procedures [326 IAC 2-7-6(1),(6)][40 CFR 63.457]

- (a) For purposes of selecting vent sampling port locations and determining vent gas stream properties, the Permittee shall comply with the applicable procedures in 40 CFR 63.457(b).
- (b) To measure detectable leaks for closed-vent systems as specified in Condition D.3.4, the Permittee shall comply with the applicable procedures in 40 CFR 63.457(d).
- (c) To demonstrate negative pressure at process equipment enclosure openings as specified in Condition D.3.4, the Permittee shall use one of the following:
 - (1) An anemometer to demonstrate flow into the enclosed opening;
 - (2) Measure the static pressure across the opening;
 - (3) Smoke tubes to demonstrate flow into the enclosure opening; or
 - (4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.8 Record Keeping Requirements [40 CFR 63.454]

- (a) The Permittee shall comply with the recordkeeping requirements of 40 CFR 63.10 of subpart A, and the requirements in paragraphs (b) through (c) of this condition for the monitoring parameters specified in Condition D.3.5.
- (b) To document compliance with Condition D.3.3, the Permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment, for each applicable enclosure opening, closed-vent system, and shall record the following information for each inspection:
 - (1) Date of inspection;
 - (2) The equipment type and identification;
 - (3) Results of negative pressure tests for enclosures;
 - (4) Results of leak detection tests;
 - (5) The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);

- (6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
 - (7) Repair methods applied in each attempt to repair the defect or leak;
 - (8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
 - (9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
 - (10) The date of successful repair of the defect or leak;
 - (11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
 - (12) The duration of the use of bypass valves on computer controlled valves.
- (c) The Permittee shall record the CMS parameters specified in Condition D.3.5 and meet the requirements specified in (a) of this condition for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this section due to a process change or modification.
- (d) Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.9 Reporting Requirements [40 CFR 63.455]

- (a) The Permittee shall comply with the reporting requirements of 40 CFR 63, subpart A and all the following requirements in this condition. The initial notification report specified under 40 CFR 63.9(b)(2) (subpart A) has been submitted.
- (b) The Permittee shall meet the requirements specified in (a) of this condition upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification. This provision does not bypass any applicable permitting requirements affecting those changes.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (1) Paper machine dryer section hood exhausts (Black Clawson, model #5 Paper Machine), installed in 1967 (fans replaced in 2002), identified as PM012, with a maximum flow rate of 234,000 acf (at 180 degrees, combined flow from 4 exhausts), using no control, and exhausting to stacks/vents 031 to 034.
- (2) Pneumatic ash handling & storage system loading and unloading (United Conveyor, storage silo, truck unloading, & water shower), installed in 1956, identified as PD014, with a maximum capacity of 30 ton per day (1 truck load), using two cyclones (part of the transfer system) and a wet scrubber for control of the loading, and exhausting to stack/vent 090 for loading and ambient for unloading.
- (3) Coal storage pile, covered conveyor, coal chutes and wetting (Barber Green), installed in 1967, identified as PD015, with a maximum capacity of 6500 ton storage pile and 225 ton per day delivery rate, using no control, and exhausting to ambient (091).
- (4) Wood chip storage and handling, installed in 1961, identified as WY004, with a maximum capacity of 20,000 to 25,000 ton inventory pile, using no control, and exhausting to ambient (092).
- (5) First stage of 2-stage brown stock washer (Impco, model Z029), installed in 1961, identified as PUM003, with a maximum capacity of 300 ton per day (both stages), using no control, and exhausting to stack/vent 057.
- (6) Second stage of 2-stage brown stock washer (Impco, model Z028), installed in 1961, identified as PUM004, with a maximum capacity of 300 ton per day (both stages), using no control, and exhausting to stack/vent 056.
- (7) Wastewater treatment lagoon, identified as GEN001, using no control, and exhausting to ambient (093).
- (8) Compost product storage, identified as GEN002, using no control, and exhausting to ambient (094).
- (9) #1 Soda ash storage tank, identified as PMET005, with a maximum capacity of 261 tons, using fabric filters for control, and exhausting to stack/vent 042. [326 IAC 6-1-2]
- (10) #2 Soda ash storage tank, identified as PMET006, with a maximum capacity of 122 tons, using fabric filters for control, and exhausting to stack/vent 043. [326 IAC 6-1-2]
- (11) Soda ash mixing tub, identified as PMET007, with a maximum capacity of 2500 gallons, using no control, and exhausting to stack/vent 044. [326 IAC 6-1-2]
- (12) Pulp chip cyclone, identified as PUM009, with a maximum capacity of 12,000 cfm and 600 ton per day, and exhausting to stack/vent 064. [326 IAC 6-1-2]
- (13) Chip cyclone, identified as WY001, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stack/vent 072. [326 IAC 6-1-2]
- (14) Chip screening room, identified as WY002, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stacks/vents 073 & 074. [326 IAC 6-1-2]
- (15) Chip silo cyclone, identified as WY003, with a maximum capacity of 600 ton per day chips, using no control, and exhausting to stack/vent 075. [326 IAC 6-1-2]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a), general particulate matter emitting units (PD014, PD015, WY004, PMET005, PMET006, PMET007, WY001, WY002, and WY003) shall not discharge to the atmosphere gases which contain in excess of 0.03 grain per dry standard cubic foot of particulate matter.

Compliance Determination Requirements

D.4.2 Particulate Matter

- (a) The wet scrubber used to control the emissions from the ash handling system (PD014) shall be in operation at all times that the ash handling system is in operation.
- (b) The fabric filters used to control the emissions from the soda ash storage tanks (PMET005 and PMET006) shall be in operation at all times that the tanks are being utilized.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
VIGO COUNTY AIR POLLUTION CONTROL

PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: International Paper Co.
Source Address: 2401 Prairieton Ave., Terre Haute, Indiana 47802
Mailing Address: PO Box 539, Terre Haute, Indiana 47808
Part 70 Permit No.: 167-7358-00022

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- ? Annual Compliance Certification Letter
- ? Test Result (specify) _____
- ? Report (specify) _____
- ? Notification (specify) _____
- ? Affidavit (specify) _____
- ? Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

VIGO COUNTY AIR POLLUTION CONTROL

**103 South 3rd Street
Terre Haute, Indiana 47807**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: International Paper Co.
Source Address: 2401 Prairieton Ave., Terre Haute, Indiana 47802
Mailing Address: PO Box 539, Terre Haute, Indiana 47808
Part 70 Permit No.: 167-7358-00022

This form consists of 2 pages

Page 1 of 2

- ? This is an emergency as defined in 326 IAC 2-7-1(12)
- ? The Permittee must notify the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC), within four (4) business hours (IDEM: 1-800-451-6027 or 317-233-5674, ask for Compliance Section; VCAPC: 812-462-3433); and
 - ? The Permittee must submit notice in writing or by facsimile within two (2) working days (IDEM Facsimile Number: 317-233-5967; VCAPC Facsimile Number 812-462-3447), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL**

Part 70 Quarterly Report

Source Name: International Paper Co.
Source Address: 2401 Prairieton Ave., Terre Haute, Indiana 47802
Mailing Address: PO Box 539, Terre Haute, Indiana 47808
Part 70 Permit No.: T167-7358-00022
Facility: PD001 and PD002 combined
Parameter: SO₂ emission rate
Limit: 4.09 pounds per million BTU

YEAR: _____

	Coal Used (Tons)	Heat Content (BTU per pound)	Ash Content (percent)	Sulfur Content (percent)	SO ₂ Emission Rate (calculated)
Month 1 _____					
Month 2 _____					
Month 3 _____					

- ? No deviation occurred in this quarter.
- ? Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: International Paper Co.
Source Address: 2401 Prairieton Ave., Terre Haute, Indiana 47802
Mailing Address: PO Box 539, Terre Haute, Indiana 47808
Part 70 Permit No.: 167-7358-00022

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

? NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

? THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality and Vigo County Air Pollution Control

Addendum to the Technical Support Document for Part 70 Operating Permit

Source Name:	International Paper Co.
Source Location:	2401 Prairieton Ave., Terre Haute, Indiana 47802
County:	Vigo County
SIC Code:	2631
Operation Permit No.:	T167-7358-00022
Permit Reviewer:	Rob Harmon

On September 12, 2003, Vigo County Air Pollution Control (VCAPC) had a notice published in the Terre Haute Tribune-Star, Terre Haute, Indiana, stating that International Paper Co. had applied for a Part 70 Operating Permit to operate an integrated, semi-chemical, pulp and paper mill. The notice also stated that VCAPC proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 30, 2003, International Paper Co. submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

Comment 1: Conditions A.2(6) & D.4(1)

Please modify the description for the paper machine dryer section hood exhausts. The four fans were replaced in 2002 and have a maximum combined flow rate of 234,000 acfm.

Response to Comment 1:

The description under Conditions A.2(6) and D.4(1) have been changed as follows:

Paper machine dryer section hood exhausts (Black Clawson, model #5 Paper Machine), installed in 1967 (**fans replaced in 2002**), identified as PM012, with a maximum flow rate of ~~248,860~~ **234,000** acf (at 180 degrees, combined flow from 4 exhausts), using no control, and exhausting to stacks/vents 031 to 034.

Comment 2: Conditions A.3(7)-(9) & D.4(13)-(15)

The descriptions should be as follows: WY001 is a *chip cyclone*, WY002 is the *chip screening room*, and WY003 is the *chip silo cyclone*.

Response to Comment 2:

The descriptions under Conditions A.3(7)-(9) and D.4(13)-(15) have been changed as follows:

Chip ~~silo~~ cyclone, identified as WY001, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stack/vent 072. [326 IAC 6-1-2]

Chip screening ~~cyclone~~ **room**, identified as WY002, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stacks/vents 073 & 074. [326 IAC 6-1-2]

Chip silo **cyclone**, identified as WY003, with a maximum capacity of 600 ton per day chips, using no control, and exhausting to stack/vent 075. [326 IAC 6-1-2]

Comment 3: Conditions B.10(d) & C.16(a), (b)

These conditions state that an Operation, Maintenance, and Monitoring (OMM) Plan per 40 CFR 60/63 will satisfy the requirements for a Preventive Maintenance Plan (PMP) and Compliance Response Plan (CRP) required by the permit. International Paper is required to prepare a PMP and CRP for various sources (facilities) at the mill. We are also required to have a Startup, Shutdown, and Maintenance (SSM) Plan for Part 63 sources at the mill, which will satisfy the requirements for a PMP and CRP. We request a provision for the SSM Plan to satisfy the requirements for a PMP and CRP in these conditions.

Response to Comment 3:

OMM Plan and SSM Plan are two different plans, with different objectives. Typically the OMM Plan can serve as the PMP, while the SSM Plan and "Parametric Monitoring Plan" can serve as the CRP. The key difference between an OMM Plan and a SSM Plan is the Monitoring part of the plans. There could be portions of the CRP (and PMP) which are not adequately addressed in an SSM Plan. International Paper may submit their specific Compliance Plan(s) with a request to have them reviewed as a Permit Modification after issuance (as they are prepared). Therefore, no change is being made at this time.

Comment 4: Condition C.15

This condition correctly states that the mill is not subject to the Chemical Accident Prevention Provisions of 40 CFR 68. It also states that the mill shall apply for a Significant Permit Modification in the event Part 68 became applicable. We suggest this condition state that the mill is required to comply with the Part 68 requirements in the event the rule threshold is exceeded. In this way, the need to apply for a Significant Permit Modification is avoided.

Response to Comment 4:

International Paper would still be required to apply for a source modification or a permit modification to install new equipment or to make significant changes to the existing equipment. Removal of the requirement under Condition C.15 would not impact Article 2 requirements becoming applicable to such changes. Therefore no change was made to the permit language.

Comment 5: Conditions D.1.1, D.1.6, & D.1.7

These conditions address particulate limits and source testing of the mill's two coal-fired boilers on an individual basis. Since the boilers exhaust to a common stack, we request the limits apply collectively to both boilers. We also request the provision to perform source testing of both boilers collectively at the frequency of once every 2 ½ years.

Response to Comment 5:

A review of the underlying provision (326 IAC 6-1-13) shows the 0.35 lb per million BTU limit is listed for those 2 units combined. That would allow for combined testing. As a result Condition D.1.1 is changed as follows:

D.1.1 Particulate Matter (PM) [326 IAC 6-1-13]

Pursuant to 326 IAC 6-1-13, PD001 and PD002 are limited ~~individually~~ to 0.35 pounds of particulate matter per million BTU **combined**. PD001 and PD002 are also limited to a combined total of 483.8 tons of particulate matter per year.

Additionally, the testing requirements under Conditions D.1.6 and D.1.7 are combined into a new Condition D.1.6. The changes are as follows:

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 6 and 12 months after issuance of this permit or within 6 months of installation of the ESP whichever comes first, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM testing on emissions from PD001 **and PD002**

combined, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every ~~five (5)~~ **two and a half (2 ½)** years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

~~D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]~~

~~During the period between 6 and 12 months after issuance of this permit or within 6 months of installation of the ESP whichever comes first, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM testing on emissions from PD002, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half years (2 ½) from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.~~

Finally, the rest of the Conditions in Section D.1 are renumbered to reflect the removal of a condition, all references to the newly renumbered conditions have been updated, and the Table of Contents has been updated.

Comment 6: Condition D.1.5

This condition should also state that opacity shall be monitored from new stack/vent 099 when the ESP is installed and operating.

Response to Comment 6:

The requested clarification has been made as follows:

D.1.5 Continuous Monitoring of Emissions [326 IAC 3-5]

Pursuant to 326 IAC 3-5-1(c)(2)(A), the Permittee shall continuously monitor **either** stack/vent 001 **or stack/vent 099 (whichever stack is actively directing the exhaust gas stream)** for opacity emissions whenever either PD001 or PD002 is in operation.

Comment 7: Condition D.2.8(b)

The mill is upgrading the tray scrubber for the fluidized bed reactor as part of the project to comply with the Pulp and Paper Combustion NESHAP. As such, the static pressure of the water line may change and a new minimum reading for parametric monitoring will need to be established. Please include a provision to describe this change and allow a sufficient period of time to determine the appropriate value.

Response to Comment 7:

The current configuration is properly addressed in the Permit. Since there is not yet any data on the appropriate range after construction is complete the approval should be issued with the current language. After data is collected this can be amended. In the meantime document the parameter and use specific language in the CRP to show the difference between the new normal operation and problem operating ranges. The Source is required by Condition D.2.9(c) to apply for a Significant Permit Modification in order to incorporate the specific language from the NESHAP (40 CFR 63, Subpart MM in this case). The Source can request the pressure drop range be addressed at that time.

Comment 8: TSD - Pg 1, Permitted Emission Unit (5)

The four fans for the paper machine dryer section hood exhausts were replaced in 2002 and have a maximum combined flow rate of 234,000 acfm.

Response to Comment 8:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that

these types of concerns are documented and part of the record regarding this permit decision. This change is the same as requested in Comment 1 above. The requested clarification is noted.

Comment 9: TSD - Insignificant Activities (18)

The description should read "Paper machine press section vacuum pump/P-135, identified as PM020 ..."

Response to Comment 9:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The requested clarification is noted.

Comment 10: TSD - Insignificant Activities (37)

This 500 gallon fuel oil tank has been removed.

Response to Comment 10:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The requested clarification is noted.

Comment 11: TSD - Insignificant Activities (44)

This 10,000 gallon underground fuel oil tank has been replaced with a 10,000 gallon aboveground tank.

Response to Comment 11:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The requested clarification is noted. The new tank would not be subject to any specific regulations, so no additional review is necessary.

Comment 12: TSD - Insignificant Activities (53)

This 4,000 gallon underground gasoline tank has been removed and replaced with a 300 gallon aboveground tank.

Response to Comment 12:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The requested clarification is noted. The new tank would not be subject to any specific regulations, so no additional review is necessary.

Comment 13: TSD - Insignificant Activities (54) & (55)

Please remove the reference to Subpart Kb applicability for these two items.

Response to Comment 13:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The Draft Permit itself correctly excludes them as not being specifically regulated. The new revision to SubPart Kb (published October 15, 2003) further supports the determination that these units are not subject to those requirements. The requested clarification is noted.

Comment 14: TSD - Pg. 18, General VOC Reduction Requirements

326 IAC 8-1-6 is not applicable to our paper machine dryer section exhausts because the fans are not a facility or a source of emissions. Please be aware that the fans are not part of the paper machine, but are roof exhausts. The paper machine was installed in 1967, prior to the applicability date of the rule.

Response to Comment 14:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The TSD already states that facility is not subject to the requirements, but listed a different reason. It appears that both reasons are valid. The requested clarification is noted.

Comment 15: TSD - Pg 18, Organic Solvent Emission Limitations

326 IAC 8-6 is not applicable to our fluidized bed reactor or vapor compression evaporator because the rule is applicable to the emissions of organic solvents, which these sources do not use. Furthermore, the reactor is subject to 40 CFR Subpart S and the evaporator is subject to 40 CFR Subpart MM.

Response to Comment 15:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The applicability section of 326 8-6 states: "sources commencing operation after October 7, 1974, and prior to January 1, 1980, located anywhere in the State, with potential emissions of 90.7 megagrams (100 tons) or greater of VOC, not limited by other rules in this Article (326 IAC 8)." The rule itself applies to a wide range of VOC emitting processes (not just solvents). However, in the TSD there is already an explanation of why that rule did not apply to those 2 specific emission units. Therefore, no change in the prior analysis is warranted.

Comment 16: TSD - The normal pressure drop accross the multiclone for Boiler No. 1 should be 5.0 to 8.0 inches of water to match Condition D.1.10(a) in the permit.

Response to Comment 16:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The requested clarification is noted. The draft permit already contains the appropriate range, so no change is needed there.

Comment 17: TSD - Compliance Requirements

The parametric monitoring values for the fluidized bed reactor should be: minimum 36.5 inches water pressure drop across venturi scrubber, minimum 30 psi static pressure of liquor line for venturi scrubber,

and minimum 2.5 psi static pressure of water line for scrubber trays (until tray scrubber upgraded) to match Condition D.2.8 in the permit.

Response to Comment 17:

The OAQ and VCAPC prefer the technical support document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The requested clarification is noted. The draft permit already contains the appropriate range, so no change is needed there.

Additionally, IDEM and VCAPC have determined the following clarifications are appropriate.

Possible applicability of the Miscellaneous Metal Coating MACT Standard (40 CFR 63, Subpart Mmmm). This standard became effective on January 2, 2004.

In May of 2002, International Paper submitted a Part 1 Applicability request as part of the 112(j) requirements. Specifically, they asked for an applicability determination regarding the Miscellaneous Metal Coating MACT (40 CFR 63, Subpart Mmmm) for maintenance related painting. This MACT standard has a specific exemption under 40 CFR 63.3881 (c)(2) for "Surface coating operations that occur at research or laboratory facilities, or is part of janitorial, building, and facility maintenance operations, ..." Therefore the operations at International Paper would not be subject to the requirements of 40 CFR 63, Subpart Mmmm.

The need to adequately replace missing COM data has been revisited, and the relevant Condition has been modified to match the most current model language.

**C.11 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
[326 IAC 2-1.1-11][326 IAC 3-5]**

- (a) The Permittee shall ~~install~~, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. **For a boiler, the COM shall be in operation at all times that the induced draft fan is in operation.**
- (b) **All continuous opacity monitoring systems shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.**
- (b)(c) In the event that a breakdown of a continuous opacity monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (e)(d) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of ~~four (4) hours or more~~, a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible. ~~If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour beginning four (4) hours after the start of the malfunction or down time.~~ **one (1) hour or more, compliance with the applicable opacity limits shall be demonstrated by the following:**
 - (1) ~~If the reading period begins less than one hour before sunset, readings~~

~~shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.~~

~~(2) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.~~

~~(3) All of the opacity readings during this period shall be reported in the Quarterly Deviation and Compliance Monitoring Reports.~~

(1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the primary COM. A trained employee shall record whether emissions are normal or abnormal for the state of operation of the emission unit at the time of the reading.

(A) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(B) If abnormal emissions are noted during two consecutive emission notations, the Permittee shall begin Method 9 opacity observations within four hours of the second abnormal notation.

(C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.

(2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the primary COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor the emissions from the emission unit stack.

(A) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.

(C) Method 9 readings may be discontinued once a COM is online.

(D) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(3) If abnormal emissions are observed, the Permittee shall take

reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

- ~~(d)~~**(e)** Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 **and 326 IAC 5-1.**

**Indiana Department of Environmental Management
Office of Air Quality
and
Vigo County Air Pollution Control**

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: International Paper Co.
Source Location: 2401 Prairieton Road, Terre Haute, Indiana 47802
County: Vigo County
SIC Code: 2631
Operation Permit No.: T167-7358-00022
Permit Reviewer: Rob Harmon

The Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) have reviewed a Part 70 permit application from International Paper Co. relating to the operation of an integrated, semi-chemical, pulp and paper mill..

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (1) Coal-fired chain-grate stoker steam boiler (Union Iron Works, model 18633), installed in 1941, identified as PD001, with a maximum capacity of 60,000 pounds of steam per hour output (84.38 million BTU per hour heat input), using a multiclone collector for control, and exhausting to stack/vent 001. The multiclone is being replaced by an ESP system. Once the ESP system is installed the boiler will exhaust to stack/vent 099. This boiler also has supplemental gas burners (installed in 2001), firing either natural gas or propane, with a maximum heat input capacity of 14.7 million BTU per hour, using no control and exhausting to Stack 001. This boiler can also use a small amount (less than 55 gallons) of fuel oil to assist with startup.
- (2) Coal-fired chain-grate stoker steam boiler (Babcock & Wilcox, model S9974), installed in 1956, identified as PD002, with a maximum capacity of 120,000 pounds of steam per hour output (176.99 million BTU per hour heat input), using a multiclone collector for control, and exhausting to stack/vent 001. The multiclone is being replaced by an ESP system. Once the ESP system is installed the boiler will exhaust to stack/vent 099. This boiler also has supplemental gas burners (installed in 2001), firing either natural gas or propane, with a maximum heat input capacity of 19.6 million BTU per hour, using no control and exhausting to Stack 001. This boiler can also use a small amount (less than 55 gallons) of fuel oil to assist with startup.
- (3) Spent liquor fluidized-bed recovery reactor (Dorr Oliver), installed in 1976, identified as PMET003, with a maximum capacity of 35 gallons per minute at 62% black liquor solids and a maximum supplemental fuel firing rate of 30.24 million BTU per hour, using a venturi scrubber for control, and exhausting to stack/vent 038.
- (4) Thermal Oxidizer ,installed in 2000, identified as RTO-1, with a minimum oxidizing zone temperature of 1600 °F, controlling emissions from the primary tank condenser (S/V 067) and the evaporator (S/V 036), and exhausting to S/V 096.
- (5) Paper machine dryer section hood exhausts (Black Clawson, model #5 Paper Machine), installed in 1967, identified as PM012, with a maximum flow rate of 218,860 acf (at 180 degrees, combined flow

from 4 exhausts), using no control, and exhausting to stacks/vents 031 to 034.

- (6) Pneumatic ash handling & storage system loading and unloading (United Conveyor, storage silo, truck unloading, & water shower), installed in 1956, identified as PD014, with a maximum capacity of 30 ton per day (1 truck load), using two cyclones (part of the transfer system) and a wet scrubber for control of the loading, and exhausting to stack/vent 090 for loading and ambient for unloading.
- (7) Coal storage pile, covered conveyor, coal chutes and wetting (Barber Green), installed in 1967, identified as PD015, with a maximum capacity of 6500 ton storage pile and 225 ton per day delivery rate, using no control, and exhausting to ambient (091).
- (8) Wood chip storage and handling, installed in 1961, identified as WY004, with a maximum capacity of 20,000 to 25,000 ton inventory pile, using no control, and exhausting to ambient (092).

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (1) Primary tank condenser (WP&M), installed in 1990, identified as PUM010, using thermal oxidizer RTO-1 for control, and exhausting to stack/vent 067.
- (2) First stage of 2-stage brown stock washer (Impco, model Z029), installed in 1961, identified as PUM003, with a maximum capacity of 300 ton per day (both stages), using no control, and exhausting to stack/vent 057.
- (3) Second stage of 2-stage brown stock washer (Impco, model Z028), installed in 1961, identified as PUM004, with a maximum capacity of 300 ton per day (both stages), using no control, and exhausting to stack/vent 056.
- (4) Wastewater treatment lagoon, identified as GEN001, using no control, and exhausting to ambient (093).
- (5) Compost product storage, identified as GEN002, using no control, and exhausting to ambient (094).

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Diesel fuel emergency fire pump (Cummins Engine/Peerless Pump), identified as PD011, with a maximum capacity of 0.162 gallons per minute at 3000 rpm, using no control, and exhausting to stack/vent 006 and 007.
- (2) #2 fuel oil horizontal storage tank, identified as PD013, with a maximum capacity of 250 gallons, using no control, and exhausting to stack/vent 008.
- (3) North exhaust (AES-Hoffman), identified as AF001, with a maximum capacity of 5900 cfm, using no control, and exhausting to stack/vent 010.
- (4) Wet-end & press section vacuum pump/P-134 (Nash), identified as AF002, with a maximum capacity of 4000 cfm, using no control, and exhausting to stack/vent 011.
- (5) Wet-end & press section vacuum pump/P-133 (Nash), identified as AF003, with a maximum capacity of 8000 cfm, using no control, and exhausting to stack/vent 012.
- (6) Fourdrinier (Black Clawson), identified as AF004, with a maximum capacity of 300 ODTP/d

(production), using no control, and exhausting to stack/vent 013.

- (7) Clear and cloudy filtrate chests (Beloit Jones), identified as AF005, with a maximum capacity of 300 ODT/d (production), using no control, and exhausting to stack/vent 014.
- (8) ENP hydraulic oil storage tank (AST), identified as AF012, with a maximum capacity of 1334 gallons, using no control, and exhausting to stack/vent 016 and 018.
- (9) CC roll hydraulic oil storage tank (AST), identified as AF013, with a maximum capacity of 1265 gallons, using no control, and exhausting to stack/vent 016 and 018.
- (10) Wet-end (fourdrinier) exhaust (Hauyck), identified as AF011, with a maximum capacity of 3500 cfm, using no control, and exhausting to stack/vent 019.
- (11) Paper machine vacuum pump/P-155 (Nash), identified as PM013, with a maximum capacity of 4000 cfm, using no control, and exhausting to stack/vent 027.
- (12) Paper machine vacuum pump/P-131 (Nash), identified as PM014, with a maximum capacity of 4000 cfm, using no control, and exhausting to stack/vent 027.
- (13) Paper machine vacuum pump/P-132 (Nash), identified as PM015, with a maximum capacity of 4000 cfm, using no control, and exhausting to stack/vent 027.
- (14) Paper machine vacuum pump/P-154 (Nash), identified as PM016, with a maximum capacity of 4000 cfm, using no control, and exhausting to stack/vent 027.
- (15) Paper machine vacuum pump/P-153 (Nash), identified as PM017, with a maximum capacity of 4000 cfm, using no control, and exhausting to stack/vent 027.
- (16) Paper machine vacuum pump/P-152 (Nash), identified as PM018, with a maximum capacity of 4000 cfm, using no control, and exhausting to stack/vent 027.
- (17) Paper machine vacuum pump trench (whitewater), identified as PM019, with a maximum capacity of 10,000 gallons, using no control, and exhausting to stack/vent 027.
- (18) Paper machine press section west exhaust (AES-Hoffman, "big" hoffman), identified as PM020, with a maximum capacity of 12,000 cfm, using no control, and exhausting to stack/vent 028.
- (19) #5 lube oil storage tank (AST), identified as PM022, with a maximum capacity of 5680 gallons, using no control, and exhausting to stack/vent 029.
- (20) Paper machine press section east exhaust (AES-Hoffman, "small" hoffman), identified as PM021, with a maximum capacity of 2,700 cfm, using no control, and exhausting to stack/vent 035.
- (21) Vapor compression evaporator (Aquachem Spray Film), identified as PMET001, with a maximum capacity of 300,513 gallon per day at 1.06 specific gravity, using thermal oxidizer RTO-1 for control, and exhausting to stack/vent 036.[40 CFR 63, Subpart S]
- (22) Continuous 4-stage digester (Black Clawson Pandia), identified as PUM008, with a maximum capacity of 4 timing screws, using thermal oxidizer RTO-1 for control, and primarily exhausting to stacks/vent 067 (with pressure relief vents designated 062, 063 and 066). [40 CFR 63, Subpart S]
- (23) Concentrated black liquor storage tank, identified as PMET004, with a maximum capacity of 375,000 gallons at 30% black liquor solids, domed and covered for control, and exhausting to stack/vent 041.

- (24) #1 Soda ash storage tank, identified as PMET005, with a maximum capacity of 261 tons, using fabric filters for control, and exhausting to stack/vent 042. [326 IAC 6-1-2]
- (25) #2 Soda ash storage tank, identified as PMET006, with a maximum capacity of 122 tons, using fabric filters for control, and exhausting to stack/vent 043. [326 IAC 6-1-2]
- (26) Soda ash mixing tub, identified as PMET007, with a maximum capacity of 2500 gallons, using no control, and exhausting to stack/vent 044. [326 IAC 6-1-2]
- (27) Black liquor tank, identified as PMET008, with a maximum capacity of 375,000 gallons, using no control, and exhausting to stack/vent 045.
- (28) Spare black liquor tank, identified as PMET009, with a maximum capacity of 250,000 gallons, using no control, and exhausting to stack/vent 046.
- (29) Green liquor storage rotary, identified as PMET016, with a maximum capacity of 10,000 gallons, using no control.
- (30) Green liquor storage rotary, identified as PMET017, with a maximum capacity of 10,000 gallons, using no control.
- (31) Green liquor storage rotary, identified as PMET018, with a maximum capacity of 10,000 gallons, using no control.
- (32) Green liquor storage rotary, identified as PMET019, with a maximum capacity of 10,000 gallons, using no control.
- (33) Green liquor storage rotary, identified as PMET020, with a maximum capacity of 10,000 gallons, using no control.
- (34) Green liquor storage rotary, identified as PMET021, with a maximum capacity of 10,000 gallons, using no control.
- (35) Thickener (2 units framed into 1 piece of equipment, Celleco Hedemora Gravity Deck), identified as NSR001, with a maximum capacity of 720 air-dried tons of pulp per day, using no control, and exhausting to stack/vent 047.
- (36) OCC thick paper stock chest (Celleco Hedemora Gravity Deck), identified as NSR002, with a maximum capacity of 13 tons at 4.5% solids, using no control, and exhausting to stack/vent 047.
- (37) #2 fuel oil horizontal storage tank (AST), identified as NSR005, with a maximum capacity of 500 gallons, using no control, and exhausting to stack/vent 049.
- (38) Hydrapulper (Black Clawson), identified as OCC001, with a maximum capacity of 650 ton per day, using no control, and exhausting to stack/vent 050.
- (39) Weak filtrate chest (Stebbins), identified as PUM005, with a maximum capacity of 45,000 gallons, using no control, and exhausting to stack/vent 058.
- (40) Cooling tower (Marley), identified as PUM007, with a maximum capacity of 400 gallons per minute (filtrate), using no control, and exhausting to stack/vent 059.
- (41) Strong filtrate chest (Stebbins), identified as PUM006, with a maximum capacity of 45,000 gallons, using no control, and exhausting to stack/vent 060.

- (42) Recovery scrubber recycle tank (Swemco), identified as PMET002, with a maximum capacity of 7500 gallons, domed and covered for control, and exhausting to stack/vent 037.
- (43) Pulp chip cyclone, identified as PUM009, with a maximum capacity of 12,000 cfm and 600 ton per day, and exhausting to stack/vent 064. [326 IAC 6-1-2]
- (44) #2 fuel oil storage tank (UST, P-MET pre-heating fuel storage), identified as M-21, with a maximum capacity of 10,000 gallons, using no control, and exhausting to stack/vent 089.
- (45) Chip silo cyclone, identified as WY001, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stack/vent 072. [326 IAC 6-1-2]
- (46) Chip screening cyclone, identified as WY002, with a maximum capacity of 12,000 cfm and 600 ton per day chips, and exhausting to stacks/vents 073 & 074. [326 IAC 6-1-2]
- (47) Chip silo, identified as WY003, with a maximum capacity of 600 ton per day chips, using no control, and exhausting to stack/vent 075. [326 IAC 6-1-2]
- (48) Hydrapulper (Black Clawson), identified as SP001, with a maximum capacity of 18 foot diameter, using no control, and exhausting to stack/vent 076.
- (49) Power transformer oil containment tank, identified as TB001, with a maximum capacity of 590 gallons, using no control, and exhausting to stack/vent 083.
- (50) Power transformer oil containment tank, identified as TB002, with a maximum capacity of 590 gallons, using no control, and exhausting to stack/vent 084.
- (51) Power transformer oil containment tank, identified as TB003, with a maximum capacity of 590 gallons, using no control, and exhausting to stack/vent 085.
- (52) #2 fuel oil storage tank (UST), identified as M-07, with a maximum capacity of 10,000 gallons, using no control, and exhausting to stack/vent 086.
- (53) Gasoline storage tank (UST), identified as M-20, with a maximum capacity of 4,000 gallons, using no control, and exhausting to stack/vent 088.
- (54) Primary tank (WP&M), identified as PUM011, with a maximum capacity of 71,775 gallons, using no control, and exhausting to stack/vent 068. [40 CFR 60, Subpart Kb]
- (55) X-clone dilution chest, identified as NSR003, with a maximum capacity of 12,000 gallons, using no control. [40 CFR 60, Subpart Kb]

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) Operating Permit 22-2631-01-93, issued by VCAPC on April 15, 1993.
- (2) Operating Permit 22-2631-02-93, issued by VCAPC on April 15, 1993.
- (3) Operating Permit 22-2631-03-93, issued by VCAPC on April 15, 1993.
- (4) Operating Permit 22-2631-04-93, issued by VCAPC on April 15, 1993.
- (5) Operating Permit 22-2631-05-93, issued by VCAPC on April 15, 1993.

- (6) Minor Source Modification 167-11920-00022, issued by VCAPC on June 1, 2000.
- (7) Experimental Operation 167-14133-00022, issued by VCAPC on March 20, 2001.
- (8) Minor Source Modification 167-14570-00022, issued by VCAPC on July 10, 2001.
- (9) Significant Source Modification 167-14568-00022, issued by VCAPC on September 13, 2001.
- (10) Minor Source Modification 167-17171-00022, issued by VCAPC on February 4, 2003.

All conditions from previous approvals were incorporated into this Part 70 permit with the following exceptions:

A previous operating permit limitation of 1.08 pounds (PM) emission per ton black liquor on the recovery reactor (PMET003) was determined to be both confusing and redundant. The recovery reactor is not used on the same schedule as normal plant operations. In International Paper's case, they store up the liquor to be treated until a sufficient amount to run for a couple of weeks solid is available. They then run the reactor close to (if not at) the rated capacity until the supply needs to be replenished. Currently this results in about 2 weeks of reactor operation for every month of pulping operation. This makes a specific pounds per ton input limitation somewhat redundant with the pounds of PM per hour limitation that is already contained in Indiana's SIP (under 326 IAC 6-1-13) since that was determined at maximum capacity as well. The confusion comes from the term "black liquor". There are several operations that the "black liquor" undergoes before being fed to the recovery reactor. Most of these operations involve reducing the amount of water in the mixture. Thus without a very specific definition of the water content that very same limit could be interpreted several different ways. Obviously, conditions which can not be readily enforced, are confusing, and are redundant do not really contribute to the air programs and therefore should be removed entirely or replaced with more appropriate conditions. In this case the SIP imposed limitation can stand alone so the condition was simply removed.

The Large Temporary Boiler and Small Temporary Boiler (MSM167-14570-00022) were not installed. Any previous permit references to them were not transferred into the Part 70.

The temporary boiler (MSM167-17171-00022) was installed and subsequently removed. Any previous permit references to this unit was not transferred into the Part 70.

Enforcement Issue

- (a) IDEM and VCAPC are aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM and VCAPC are reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 4, 1996. Additional information was received on June 16, 1997; February 22, 2000; November 27, 2000; December 26, 2000; March 7, 2001; March 13, 2001; June 8, 2001; June 14, 2001; June 18, 2001; and July 13, 2001.

There was no notice of completeness letter mailed to the source.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	greater than 250
VOC	greater than 100 less than 250
CO	greater than 250
NO _x	greater than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Acetaldehyde	greater than 10
Acrolein	less than 10
Arsenic Compounds	less than 10
Benzene	less than 10
Cadmium Compounds	less than 10
Carbon Tetrachloride	less than 10
Chlorobenzene	less than 10
Chloroform	less than 10
1,2-Dichloroethane	less than 10
Formaldehyde	less than 10
Hydrochloric Acid	greater than 10
Lead Compounds	less than 10
Methanol	greater than 10
Methyl Ethyl Ketone	less than 10
Methylene Chloride	less than 10
Methyl Isobutyl Ketone	less than 10
Styrene	less than 10
Tetrachloroethylene	less than 10
Toluene	less than 10
1,2,4-Trichlorobenzene	less than 10
1,1,1-Trichloroethane	less than 10
1,1,2-Trichloroethane	less than 10
Trichloroethylene	less than 10

Xylenes	less than 10
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ and VCAPC emission data (as reported in the 2002 Emission Statement).

Pollutant	Actual Emissions (tons/year)
PM	286.02
PM-10	147.30
SO ₂	1955.94
VOC	87.55
CO	219.82
NO _x	270.59
HAP (specify)	NR

County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Vigo County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration

(PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) PD001 (Boiler #1) and PD002 (Boiler #4) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40b, Subpart Db), because of date of construction. The Subpart only regulates units constructed after June 19, 1984. PD001 was constructed in 1941 and PD002 was constructed in 1956. Additionally, they are not subject to any of the other subpart D sections because of size.
- (b) AF004, and AF005 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb), because of date of construction. The Subpart only regulates tanks constructed after July 23, 1984 and all these tanks were installed in 1980 or before.
- (c) PD013, AF012, AF013, PM019, PM022, PMET002, PMET016, PMET017, PMET018, PMET019, PMET020, PMET021, NSR005, TB001, TB002, TB003, M-07, M-20, and M-21 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb), because of the tank's capacity. Subpart Kb only regulates tanks with capacities of 40 cubic meters (equal to 10,567 gallons) or more.
- (d) PUM011 and NSR003 are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Kb) because they are process flow through tanks. This type of operation was discussed in an October 29, 1998 letter from OECA to the American Forest and paper Association.
- (e) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart BB), because the operation is not a Kraft Mill.
- (f) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.250, Subpart Y), because the operation does not fit the definition of a coal preparation plant and because the operation was constructed prior to the October 24, 1974 applicability date.
- (g) This source does not contain any facilities subject to requirements under the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61. These standards regulate emissions of selected pollutants, such as benzene and vinyl chloride. Since International Paper does not utilize any of the listed compounds they are not subject to these regulations.
- (h) This source does not contain any facilities subject to requirements under the Chemical Accident Prevention Provisions, 40 CFR Part 68. These requirements apply to companies that use or store greater than specified thresholds of certain hazardous compounds, and are aimed at risk assessment and accident prevention. International Paper does not have any of those compounds in greater than the applicable threshold amount, and

are therefore not subject to these regulations.

- (i) All LVHC (low volume high concentration) system components are subject to the National Emission Standard Hazardous Air Pollutants, 40 CFR 63.440, Subpart S because International Paper is a major source of HAPs, Produces pulp paper or paperboard, and utilizes the semichemical pulping process. This subpart has been incorporated into 326 IAC 20-33. The requirements of this subpart are as follows:

40 CFR 63.440 Applicability.

- (b)(1) The affected source is the total of all HAP emission points in the pulping and bleaching systems.
- (d) Each existing source shall achieve compliance no later than April 16, 2001. *International Paper met these requirements by the specified deadline.*

40 CFR 63.441 Definitions.

Pursuant to 40 CFR 63.441 Low Volume, High Concentration or LVHC system is defined to mean the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

Pursuant to 40 CFR 63.441 High Volume, Low Concentration or HVLC system means the collection of equipment including the pulp washing, knotter, screen, decker, and oxygen delignification systems, weak liquor storage tanks, and any other equipment serving the same function as those previously listed.

40 CFR 63.443 Standards for the pulping system at kraft, soda, and semi-chemical processes.

- (b)(1) At each existing affected source, the total HAP emissions from each LVHC system shall be controlled.
- (c) The LVHC system shall be enclosed and vented into a closed-vent system and routed to a control device that meets the minimum requirements specified in 40 CFR 63.443(d).
- (d) The control device used to reduce total HAP emissions from the LVHC system shall:
- (1) Reduce total HAP emissions by 98 percent or more by weight; or
 - (2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to ten (10) percent oxygen on a dry basis; or
 - (3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 °C (1600 °F) and a minimum residence time of 0.75 seconds; or
 - (4) Reduce total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone.
*International Paper has chosen to use option #3 as their compliance method.
This TSD will contain all the applicable sections of the NESHA, but only those specific to their control option will be transferred to the Part 70 Permit.*
- (e) Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:
- (1) One percent for control devices used to reduce the total HAP emissions from the LVHC system; and
 - (2) Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and
 - (3) Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

40 CFR 63.450 Standards for enclosures and closed-vent systems.

- (a) Each enclosure and closed-vent system specified in 63.443(c) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (b) through (d) of this section:

- (b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in 40 CFR 63.457(e). Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.
- (c) Each component of the closed-vent system used to comply with 40 CFR 63.443(c) that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in 40 CFR 63.457(d).
- (d) On each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.443(c) shall comply with either of the following requirements:
 - (1) On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or
 - (2) For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

40 CFR 63.453 Monitoring requirements.

- (a) Each owner or operator subject to the standards specified in 40 CFR 63.443(c) and 40 CFR 63.450(d) shall install, calibrate, certify, operate and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in 40 CFR 63.2 of this part) as specified in paragraphs (b) through (m) of this section. The CMS shall include a continuous recorder.
- (b) A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of 40 CFR 63.443(d)(1) through (d)(3). Owners and operators complying with the requirements in 40 CFR 63.443(d)(2) or (d)(3) shall monitor the parameter specified and for the temperature and concentration limits specified.
- (k) Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the requirements specified below:
 - (1) For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.
 - (2) Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.
 - (3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in 40 CFR 63.450(c) measured initially and annually by the procedures in 40 CFR 63.457(d).
 - (4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e).
 - (5) The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.
 - (6) If an inspection required by (k)(1) through (k)(5) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR 63.450, or if an instrument reading of 500 parts per million by volume or greater above

- background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.
- (i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.
 - (ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified.
- (m) Each owner or operator using a control device, technique or an alternative parameter other than those specified in paragraphs (b) through (l) of this section shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements.
- (n) To establish or reestablish the value for each operating parameter required to be monitored under paragraphs (b) through (j), (l), and (m) of this section or to establish appropriate parameters for paragraphs (f), (i) and (m) of this section, each owner or operator shall use the following procedures:
- (1) During the initial performance test required in 40 CFR 63.457(a) or any subsequent performance test, continuously record the operating parameter;
 - (2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;
 - (3) The owner or operator shall provide for the Administrator's approval the rationale for selecting the monitoring parameters necessary to comply with paragraphs (f), (i), and (m) of this section; and
 - (4) Provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.
- (o) Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under paragraphs (a) through (n) of this section and established under this subpart. Except as provided in paragraph (p) of this section, 40 CFR 63.443(e), or 40 CFR 63.446(g), operation of the control device below the minimum operating parameter values or above the maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

On August 20, 2001, International Paper was issued a custom schedule for 40 CFR 63.453(k)(2) and (k)(5) by the USEPA, Region V (as listed on page 10 of this TSD). This custom schedule allows for a more flexible schedule on the required inspections, provided they still meet this criteria: "Inspections must be performed once during the calendar month, with at least 21 days elapsed time between inspections." A copy of the custom schedule will be attached to this review.

40 CFR 63.454 Recordkeeping requirements.

- (a) The owner or operator of each affected source subject to the requirements of this subpart shall comply with the recordkeeping requirements of 40 CFR 63.10 of subpart A of this part, and the requirements in paragraphs (b) through (d) of this section for the monitoring parameters specified in 40 CFR 63.453.
- (b) For each applicable enclosure opening, closed-vent system, the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:
 - (1) Date of inspection;
 - (2) The equipment type and identification;
 - (3) Results of negative pressure tests for enclosures;

- (4) Results of leak detection tests;
 - (5) The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);
 - (6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
 - (7) Repair methods applied in each attempt to repair the defect or leak;
 - (8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
 - (9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
 - (10) The date of successful repair of the defect or leak;
 - (11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
 - (12) The duration of the use of bypass valves on computer controlled valves.
- (d) The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in paragraph (a) of this section for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.

40 CFR 63.455 Reporting requirements.

- (a) Each owner or operator of a source subject to this subpart shall comply with the reporting requirements of subpart A of this part as specified in table 1 and all the following requirements in this section. The initial notification report specified under 40 CFR 63.9(b)(2) of subpart A of this part shall be submitted by April 15, 1999.
- (d) The owner or operator shall meet the requirements specified in paragraph (a) of this section upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.

40 CFR 63.457 Test methods and procedures.

- (a) An initial performance test is required for all emissions sources subject to the limitations in 40 CFR 63.443, 63.444, 63.445, 63.446, and 63.447, except those controlled by a combustion device that is designed and operated as specified in 40 CFR 63.443(d)(3) or (d)(4).
- (b) For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in 40 CFR 63.443, 63.444, 63.445, and 63.447, each owner or operator shall comply with the applicable procedures in paragraphs (b)(1) through (b)(6) of this section.
 - (1) Method 1 or 1A of part 60, appendix A, as appropriate, shall be used for selection of the sampling site as follows:
 - (i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere.
 - (ii) For determining compliance with percent reduction requirements sampling sites shall be located prior to the inlet of the control device and at the outlet of the control device; measurements shall be performed simultaneously at the two sampling sites; and
 - (iii) For determining compliance with concentration limits or mass emission rate limits, the sampling site shall be located at the outlet of the control device.
 - (2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.
 - (3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2B, 2C, or 2D of part 60, appendix A, as appropriate.
 - (4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.
 - (5) To determine vent gas concentrations, the owner or operator shall collect a minimum of three samples that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

- (i) Method 308 in Appendix A of this part shall be used to determine the methanol concentration.
- (iii) Any other method that measures the total HAP or methanol concentration that has been demonstrated to the Administrator's satisfaction.
- (6) The minimum sampling time for each of the three runs per method shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.
- (d) To measure detectable leaks for closed-vent systems as specified in 40 CFR 63.450 or for pulping process wastewater collection systems as specified in 40 CFR 63.446(d)(2)(i), the owner or operator shall comply with the following:
 - (1) Method 21, of part 60, appendix A; and
 - (2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:
 - (i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.
- (e) To demonstrate negative pressure at process equipment enclosure openings as specified in 40 CFR 63.450(b), the owner or operator shall use one of the following:
 - (1) An anemometer to demonstrate flow into the enclosed opening;
 - (2) Measure the static pressure across the opening;
 - (3) Smoke tubes to demonstrate flow into the enclosure opening; or
 - (4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.
- (f) For purposes of complying with the requirements in 40 CFR 63.443, 63.444, and 63.447, the owner or operator shall measure the total HAP concentration as one of the following:
 - (1) As the sum of all individual HAP's; or
 - (2) As methanol.
- (i) To demonstrate compliance with the mass emission rate, mass emission rate per megagram of ODP, and percent reduction requirements for vent gas streams specified in 40 CFR 63.443, 63.444, 63.445, and 63.447, the owner or operator shall use the following:
 - (1) The total HAP mass emission rate shall be calculated using the following equation:

$$E = K_2 \sum_{j=1}^n C_j M_j Q_s$$

Where:

- E = Mass emission rate of total HAP from the sampled vent, kilograms per hour.
- K₂ = Constant, 2.494x10⁻⁶ (parts per million by volume)⁻¹ (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.
- C_j = Concentration on a dry basis of pollutant j in parts per million by volume as measured by the test methods specified in paragraph (b) of this section.
- M_j = Molecular weight of pollutant j, gram/gram-mole.
- Q_s = Vent gas stream flow rate (dry standard cubic meter per minute) at a temperature of 20 °C as indicated in paragraph (b) of this section.
- n = Number of individual pollutants, i, summed to calculate total HAP.
- (2) The total HAP mass emission rate per megagram of ODP shall be calculated using the following equation:

$$F = \frac{E}{P}$$

Where:

- F = Mass emission rate of total HAP from the sampled vent, in kilograms per megagram of ODP.
 E = Mass emission rate of total HAP from the sampled vent, in kilograms per hour determined as specified in paragraph (i)(1) of this section.
 P = The production rate of pulp during the sampling period, in megagrams of ODP per hour.

- (3) The total HAP percent reduction shall be calculated using the following equation:

$$R = \frac{E_i - E_o}{E_i} (100)$$

Where:

- R = Efficiency of control device, percent.
 E_i = Inlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.
 E_o = outlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.

- (k) To demonstrate compliance with the total HAP concentration limit of 20 ppmv in 40 CFR 63.443(d)(2), the concentration measured using the methods specified in paragraph (b)(5) of this section shall be corrected to 10 percent oxygen using the following procedures:
- (1) The emission rate correction factor and excess air integrated sampling and analysis procedures of Methods 3A or 3B of part 60, appendix A shall be used to determine the oxygen concentration. The samples shall be taken at the same time that the HAP samples are taken.
 - (2) The concentration corrected to 10 percent oxygen shall be computed using the following equation:

$$C_c = C_m \frac{10.9}{20.9 - \%O_{2d}}$$

Where:

- C_c = Concentration of total HAP corrected to 10 percent oxygen, dry basis, parts per million by volume.
 C_m = Concentration of total HAP dry basis, parts per million by volume, as specified in paragraph (b) of this section.
 %O_{2d} = Concentration of oxygen, dry basis, percent by volume.

- (j) PMET003 (Spent liquor fluidized-bed reactor) is subject to the National Emission Standard Hazardous Air Pollutants, 40 CFR 63, Subpart MM (because it is an existing semichemical combustion unit located at a stand-alone semichemical pulp mill, that makes it an affected source under 40 CFR 63.860(b)) and shall be in compliance with all applicable provisions of this rule no later than March 13, 2004. The Pulp and Paper Recovery Combustion NESHAP consists of the following sections:
- 63.860 Applicability and designation of affected source
 - 63.861 Definitions
 - 63.862 Standards
 - 63.863 Compliance dates
 - 63.864 Monitoring requirements
 - 63.865 Performance test requirements and test methods
 - 63.866 Recordkeeping requirements
 - 63.867 Reporting requirements
 - 63.868 Delegation of authority
- Appendix to Subpart MM - Table

- (k) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are applicable to this source because the source is a major source of HAPs (i.e., the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source includes one or more units that belong to one or more source categories affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002. This rule requires the source to:

- (1) Submit a Part 1 MACT Application by May 15, 2002; and
- (2) Submit a Part 2 MACT Application within twenty-four (24) months after the Permittee submitted a Part 1 MACT Application.

The Permittee submitted a timely Part 1 MACT Application (received on May 16, 2002, postmarked on May 15th).. The Permittee is required to submit a Part 2 MACT Application on or before May 15, 2004. Note that on April 25, 2002, Earthjustice filed a lawsuit against the US EPA regarding the April 5, 2002 revisions to the rules implementing Section 112(j) of the Clean Air Act. In particular, Earthjustice is challenging the US EPA's 24-month period between the Part 1 and Part 2 MACT Application due dates. Therefore, the Part 2 MACT Application due date may be changed as a result of the suit.

(l) 40 CFR 64 Compliance Assurance Monitoring

- (a) This source does contain a pollutant-specific emissions unit as defined in 40 CFR 64.1 for particulate matter:
- (1) with the potential to emit before controls equal to or greater than the major source threshold for particulate matter;
 - (2) that is subject to an emission limitation or standard for particulate matter; and
 - (3) uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are applicable to this source.

- (c) The pollutant-specific emission unit is not a "large unit" as described in 40 CFR 64.5. Therefore, the owner or operator shall submit a CAM plan pursuant to 40 CFR 64 as part of the Part 70 renewal application.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

The PSD trigger date used to appear under 326 IAC 2-2-2(b)(1), however that rule language has been removed. The underlying federal provisions still exist though {specifically 40 CFR 52.21(i)(4)(i)} and that exempts sources and modifications which commenced construction prior to August 7, 1977. Most of the emission units at International Paper were installed prior to that trigger date. Since the source is not a listed source category and the potential (and actual) emissions from those units exceed 250 tons per year this source would have been considered an Existing Major source as of the trigger date. Changes after that date would then need a comparison to the significant increase thresholds.

The only significant emission units with installation dates after the trigger date are: the thermal oxidizer (RTO-1) and the primary tank condenser (PUM010). The RTO and the temp boilers were specifically reviewed by this agency and issued appropriate approvals demonstrating that the changes did not exceed those thresholds.

The primary tank condenser, along with the primary tank, was installed in 1990 and replaced previously existing

equipment that served the same function. Neither of these pieces of equipment directly generate a significant amount of emissions, but they do transfer the VOC generated in the 4 stage digester. Considering the whole series of units to be a single system, and then applying a past actual to future potential test shows VOC emissions to be below the 40 tpy significant level for VOC [54.9 tpy - 45.8 tpy = 9.1 tpy based on information provided in the Part 70 application]. Therefore 326 IAC 2-2 did not apply in this case.

The thermal oxidizer (RTO-1) was installed in 2000 as part of compliance with the applicable NESHAP (40 CFR 63, subpart S). It is a control device and was reviewed prior to installation. It results in a decrease in VOC and HAP emissions, while only generating a small amount of combustion related products. Therefore 326 IAC 2-2 did not apply in this case.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 2-4.1 (New source toxics control)

International Paper is a major source of HAPs. However, all of the emission units associated with those HAP emissions were constructed prior to July 27, 1997. Therefore, none of the emission units are subject to the requirements of 326 IAC 2-4.1.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

This is the correct version of the Opacity Regulation because International Paper Co. is not located within the small segment of Vigo County subject to the more stringent thirty percent (30%) limitation.

State Rule Applicability - Individual Facilities

326 IAC 6-1-2 (Particulate Matter)

Since Vigo County is listed under 326 IAC 6-1-7, particulate matter emitting units are subject to the requirements of 326 IAC 6-1-2. 326 IAC 6-1-2 establishes emission limits for general particulate emission facilities (#1 soda ash storage tank, #2 soda ash storage tank, soda ash mixing tank, Chip silo cyclone, chip screening cyclone, and chip silo). Pursuant to 326 IAC 6-1-2(a) emissions from these facilities shall not exceed 0.03 grain per dry standard cubic foot.

326 IAC 6-1-13 (Particulate Matter)

Pursuant to 326 IAC 6-1-13, PD001 and PD002 shall be limited to 0.35 pounds per MMBTU and a combined total of 483.8 tons per year.

The last stack test conducted on these 2 units indicated they were in compliance while utilizing the multiclones for control. Periodic testing will be required to verify that determination (schedule listed below under *Testing Requirements* section).

Pursuant to 326 IAC 6-1-13, PMET003 shall be limited to 71 pounds per hour and a total of 311.0 tons per year.

Periodic testing will be required to verify compliance (schedule listed below under *Testing Requirements* section).

326 IAC 7-4-3 (Sulfur dioxide)

Pursuant to 326 IAC 7-4-3, PD001 and PD002 shall each be limited to 4.09 pounds per MMBtu.

Based on a heating value of 12,000 Btu per pound of coal, the fuel sulfur content for the coal used in PD001 and PD002 shall be limited to 2.58% sulfur.

$$\frac{4.09 \text{ lb}}{\text{MMBtu}} = \frac{38 \text{ S lb}}{\text{ton}} \times \frac{1 \text{ lb}}{0.012 \text{ MMBtu}} \times \frac{1 \text{ T}}{2000 \text{ lb}}$$

$$S = 2.58\%$$

The source is currently combusting coal with a maximum sulfur content of 2.34% sulfur, therefore, they are in compliance with this rule.

326 IAC 8-1-6 (General VOC Reduction Requirements)

The fluidized bed recovery reactor (PMET003) was installed in 1976. Therefore it would not be subject to the requirements of 326 IAC 8-1-6 because the date of installation is before the November 1, 1980 effective date of the rule.

The vapor compression evaporator (PMET001) was installed in 1976. Therefore it would not be subject to the requirements of 326 IAC 8-1-6 because the date of installation is before the November 1, 1980 effective date of the rule.

The paper machine dryer section exhausts (PM012) were installed in 1967. Therefore it would not be subject to the requirements of 326 IAC 8-1-6 because the date of installation is before the November 1, 1980 effective date of the rule.

The primary tank condenser (PUM010) was installed in 1990. However, it is not an emission unit by itself. It handles exhaust from the digesters after they pass through the primary tank. Therefore, it would not have been considered a new facility, just a modification of an existing system. The rule only applies to new facilities. Also, this emission point is now subject to the requirements of 40 CFR 63, subpart S and required to control emissions pursuant to that MACT standard.

326 IAC 8-4-3 (Petroleum liquid storage tanks)

Pursuant to 326 IAC 8-4-1(d), Section 2 of this rule only applies to new units in Vigo County if they were constructed after January 1, 1980. Additionally, pursuant to 326 IAC 8-4-3 only storage tanks greater than 39,000 gallons are subject to the requirements. None of the tanks at International Paper meet all three criteria (storage tank, post Jan 1, 1980, and greater than 39,000 gallons). Therefore the requirements of 326 IAC 8-4-3 do not apply.

326 IAC 8-6 (Organic Solvent Emission Limitations)

The fluidized bed recovery reactor (PMET003) and the vapor compression evaporator (PMET001) would not be subject to the requirements of 326 IAC 8-6 because the source was in operation well before the October 7, 1974 cutoff date. Even if the criteria was based on facilities, PMET001 has potential emission of 0.5 tpy VOC and PMET003 has potential emissions of 23.4 tpy VOC. Even combined they are below the 100 tpy threshold.

Testing Requirements

PD001 (Boiler #1) has actual emissions above 100 tons per year, but the capacity is below 100 million BTU per hour (on coal). Therefore, the boiler needs to be tested once per permit term for particulate matter.

PD002 (Boiler #4) has actual emissions above 100 tons per year, and the capacity is above 100 million BTU per hour (on coal). Therefore, the boiler needs to be tested twice per permit term for particulate matter.

PMET003 (Recovery Reactor) has very high potential emissions, combined with a very high collection efficiency for the associated scrubber. Therefore, the unit needs to be tested once per permit term for particulate matter. This system could also be subject to specific testing requirements from 40 CFR 63, Subpart MM after the compliance date of that regulation.

The LVHC (low volume high concentration) system has specific testing requirements from 40 CFR 63, Subpart S.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

PD001 (Boiler #1) has applicable compliance monitoring conditions as specified below:

- (a) The Permittee shall record the total static pressure drop across the multicclone controlling the boiler emissions, at least once per shift when the boiler is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the multicclone shall be maintained within the range of 3.0 to 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for one reading.
- (b) The Permittee shall inspect the multicclone controlling the boiler emissions at least once per year.
- (c) Once the multicclone is replaced by the ESP, (a) and (b) are replaced by:

Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is in operation, by measuring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.
- (b) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below 50%. T-R set failure resulting in less than 50% availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (d) Since this boiler has actual emissions above 100 tons per year, but the capacity is below 100 million BTU per hour, the boiler shall be tested once per permit term. The tests shall be for particulate matter.

These monitoring conditions are necessary in order to assure compliance with the particulate limitations set forth in 326 IAC 6-1-13.

PD002 (Boiler #2) has applicable compliance monitoring conditions as specified below:

- (a) The Permittee shall record the total static pressure drop across the multiclone controlling the boiler, at least once per shift when the boiler is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the multiclone shall be maintained within the range of 1.5 to 5.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for one reading.
- (b) The Permittee shall inspect the multiclone controlling the boiler emissions at least once per year.
- (c) Once the multiclone is replaced by the ESP, (a) and (b) are replaced by:

Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- (a) The ability of the ESP to control particulate emissions shall be monitored once per shift, when the unit is in operation, by measuring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.
- (b) Reasonable response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the percentage of T-R sets in service falls below 50%. T-R set failure resulting in less than 50% availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (d) Since this boiler has actual emissions above 100 tons per year and has a heat input rating in excess of 100 million BTU per hour, the boiler shall be tested twice per permit term. The tests shall be for particulate matter.

These monitoring conditions are necessary in order to assure compliance with the particulate limitations set forth in 326 IAC 6-1-13.

PMET003 (Recovery reactor) has applicable compliance monitoring conditions as specified below (additional monitoring requirements may be needed prior to the compliance date of 40 CFR 63, Subpart MM):

- (a) The Permittee shall record the total static pressure drop across the venturi scrubber controlling the recovery reactor, at least once per shift when the reactor is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies other wise, the pressure drop across the venturi scrubber shall be maintained within the range of 38 to 42 inches of water or a range established during the latest stack test. Additionally, the Permittee shall record the water flow rate through the venturi scrubber controlling the recovery reactor, at least once per shift when the reactor is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies other wise, the water flow rate through the venturi scrubber shall be maintained within the range of 40 to 50 gallons per minute or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when either reading is out of the above mentioned range for one reading.

- (b) visible emissions notations of the recovery reactor stack exhaust shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed. In the case of wet scrubber visible emissions, both the color of the water vapor plume and any visible emissions after the visible water vapor subsides must be observed.
- (c) Since this recovery reactor has very high potential emissions and a very high collection efficiency, the recovery reactor shall be tested once per permit term. The tests shall be for particulate matter.

These monitoring conditions are necessary in order to assure compliance with the particulate limitations set forth in 326 IAC 6-1-13.

The **LVHC (Low Volume High Concentration) system** has specific monitoring requirements from 40 CFR 63, Subpart S.

The **Continuous Opacity Monitor (COM)** has applicable compliance monitoring conditions as specified in 326 IAC 3-5 (listed below).

326 IAC 3-5 (Continuous Monitoring of Emissions)

Pursuant to 326 IAC 3-5-1(c)(2)(A) both PD001 and PD002 are required to continuously monitor for opacity, based on the size of the units and the combined stack.

Pursuant to 326 IAC 3-5-2 (Minimum performance and operating specifications) owners and operators of monitoring equipment installed to comply with this rule shall comply with the performance specifications and operating requirements as follows:

- (1) Performance specifications set forth in 40 CFR 60 Appendix B, shall be used to certify monitoring equipment installed pursuant to this rule; however, where reference is made to the administrator in 40 CFR 60, Appendix B, the term "department" shall be inserted for purposes of this rule, and where continuous emissions monitors were installed prior to March 1983 for measuring opacity, the performance specification in 40 CFR 60, Appendix B, 1982 Edition, shall apply.
- (2) Cycling times, which include the total time a monitoring system requires to sample, analyze, and record an emission measurement, shall be as follows:
 - (A) Continuous monitoring systems for measuring opacity shall complete a minimum of one (1) cycle of operation (sampling, analyzing, and data recording) for each successive ten (10) second period.
- (3) For opacity monitoring when effluent from two (2) or more affected facilities is combined before being released to the atmosphere, the owner or operator may either:
 - (A) install a continuous opacity monitoring system on the combined effluent; or
 - (B) install a continuous opacity monitoring system comprised of, and capable of combining the signals from, component transmissometers on each effluent stream.Results shall be reported on combined effluent.
- (5) Instrument full-scale response or upper limit of concentration measurement range for all opacity monitoring systems shall be set at one hundred percent (100%) opacity if possible.
- (6) Locations for installing continuous monitoring systems or monitoring devices that vary from locations provided under the performance specifications of 40 CFR 60, Appendix B, shall be approved by the department and the US EPA upon a demonstration by the owner or operator that installation at alternative locations will enable accurate and representative measurements.
- (7) Owners or operators of affected facilities shall conduct continuous emission monitoring system performance evaluations, upon the request of the department, to demonstrate continuing compliance of the continuous emission monitoring systems with performance specifications as follows:
 - (A) A performance evaluation is a quantitative and qualitative evaluation of the performance of the continuous monitor in terms of:
 - (i) accuracy;

- (ii) precision;
 - (iii) reliability;
 - (iv) representativeness; and
 - (v) comparability;
- of the data acquired by the monitoring system.
- (B) The department may request owners or operators of affected facilities, as defined in section 1(b) of this rule, to conduct continuous emission monitoring system performance evaluations if the department has reason to believe, based on review of monitoring data, quality assurance data, inspections, or other information, that the continuous emission monitoring system is malfunctioning or may be providing invalid data over an extended period.
- (C) A written report containing the complete information of the performance evaluations shall be furnished to the department within forty-five (45) days after the test date. The department may conduct performance evaluations of the continuous emission monitoring systems at any time in order to verify the continued compliance of the systems with the performance specifications.

Pursuant to 326 IAC 3-5-3(Monitor system certification) monitor system certification requirements apply to sources and facilities subject to this rule as follows:

- (1) The owner or operator shall conduct the applicable performance specifications tests in accordance with the procedures specified in 40 CFR 60, or other applicable federal regulations, for the required monitoring system as follows:
 - (A) Not later than one hundred eighty (180) days after a facility start-up or initial monitor installation date.
 - (B) Not later than forty-five (45) unit operating days after monitor replacement date, or significant monitor repair as described in IDEM's Quality Assurance Manual, Chapter 20 (dated June 20, 1997), which affects the ability of the analyzer to function date.
- (2) The owner or operator shall notify the department in writing as follows:
 - (A) No less than fourteen (14) days in advance of the start of continuous opacity monitor (COM) certification.
- (3) The owner or operator shall submit all the required test data and information in the form of a written report to the department for review and approval within forty-five (45) days of completion of the performance specification test.
- (4) The department shall issue a written notice of certification status upon review of the compliance certification test report. A required monitoring system is certified when the department issues a certification letter stating that the applicable components, has satisfactorily met all federal and state monitoring requirements.
- (5) The department may decertify a required monitoring system if an audit or performance evaluation reveals that such monitoring system or a component thereof does not meet applicable performance specifications or requirements. The owner or operator shall repeat the certification process for the required monitoring system within forty-five (45) days of the date of the department's decertification of the required monitoring system.

Pursuant to 326 IAC 3-5-4(Standard operating procedures) the owner or operator shall meet the following:

- (a) The owner or operator of each affected facility specified in section 1(b) of this rule, any facility subject to 326 IAC 12, or any facility required to monitor emissions on a continuous basis shall submit to the department, within ninety (90) days after monitor installation, a complete, written continuous monitoring standard operating procedures (SOP). If revisions are made to the SOP, updates shall be submitted to the department biennially. At a minimum, the SOP shall describe complete step-by-step procedures and operations as follows:
 - (1) A description of the facility monitored.
 - (2) A listing of the following:
 - (A) Each monitor's brand.
 - (B) Model number.
 - (C) Serial number.
 - (D) Monitoring location.

- (E) Data handling and acquisition system.
- (3) Examples of all reporting and log forms.
- (4) Record keeping and reporting procedures that include the following:
 - (A) Reporting of instrument precision and accuracy.
 - (B) Reporting of emissions data.
- (5) Methods and procedures for analysis and data acquisition.
- (6) Calibration procedures that include the following:
 - (A) Calibration error limits and linearity.
 - (B) Calibration gas type, gas quality, and traceability to the National Institute of Standards and Technology.
 - (C) Calibration frequency.
 - (D) Criteria for recalibration, and analysis procedures to periodically verify the accuracy of span and calibration standards.
- (7) Operation procedures that include daily procedures, quantifying and recording daily zero (0) and high level drift that meet the requirements of 40 CFR 60, Appendix B, Performance Specification 2, Section 4.2 or other applicable regulations, and other operating parameter checks indicating correct operational status.
- (8) Quality control and quality assurance procedures that include the following:
 - (A) A statement of quality policy and objectives.
 - (B) Organization and responsibilities description.
 - (C) Calibration and span and zero (0) drift criteria.
 - (D) Excessive drift criteria.
 - (E) Corrective action for excessive drift.
 - (F) Precision and accuracy audits.
 - (G) Corrective action for accuracy audits failure.
 - (H) Data validity criteria.
 - (I) Participation in department audits.
 - (J) Data recording and calculation audits.
- (9) Preventive maintenance procedures and corrective maintenance procedures that include those procedures taken to ensure continuous operation and to minimize malfunctions.
- (10) A listing of the manufacturer's recommended spare parts inventory.
- (b) If a facility owner or operator fails to submit a SOP or submits an SOP that fails to address the factors provided under subsection (a), the department may require a performance evaluation pursuant to section (2) of this rule.

Pursuant to 326 IAC 3-5-5(Quality assurance requirements) the owner or operator shall meet the following:

- (c) Quality control (QC) requirements for continuous opacity monitoring systems (COMS) are as follows:
 - (1) For calibration drift (CD) assessment, the COMS shall be checked at least once daily. The CD shall be quantified and recorded at zero (0) (or low level) and upscale level opacity. The COMS shall be adjusted whenever the CD exceeds the specification of 40 CFR 60, Appendix B, Performance Specification 1 (PS-1), and the COMS shall be declared out of control when the CD exceeds twice the specification of PS-1. Corrective actions, followed by a validating CD assessment, are required when the COMS is out of control.
 - (2) For fault indicators assessment, the fault lamp indicators, data acquisition system error messages, and other system self-diagnostic indicators shall be checked at least daily. Appropriate corrective actions shall be taken when the COMS is operating outside the preset limits.
 - (3) For performance audits, checks of the individual COMS components and factors affecting the accuracy of the monitoring data, as described in this subdivision, shall be conducted, at a minimum, on a calendar quarter basis. The absolute minimum checks included in the performance audit are as follows:
 - (A) The status of the optical alignment of the monitor components shall be checked and recorded according to the procedure specified by the monitor manufacturer. Monitor components must be realigned as necessary.
 - (B) The apparent effluent opacity shall be compared and recorded before and after cleaning

each of the exposed optical surfaces. The total optical surface dust accumulation shall be determined by summing up the apparent reductions in opacity for all of the optical surfaces that are cleaned. Caution must be employed in performing this check since fluctuations in effluent opacity occurring during the cleaning cycle may adversely affect the results.

- (C) The zero (0) and upscale response errors shall be determined and recorded according to the CD procedures. The errors are defined as the differences (in percent opacity) between the correct value and the observed value for the zero (0) and high level calibration checks.
 - (D) The value of the zero (0) compensation applied at the time of the audit shall be calculated as equivalent opacity, corrected to stack exit conditions, according to the procedures specified by the manufacturer. The compensation applied to the effluent recorded by the monitor system shall be recorded.
 - (E) The optical pathlength correction ratio (OPLR) shall be computed from the monitor pathlength and stack exit diameter and shall be compared, and the difference recorded, to the monitor setup OPLR value. The stack exit correlation error shall be determined as the absolute value of the difference between the measured value and the corrected value, expressed as a percentage of the correct value.
 - (F) A three-point calibration error test of the COMS shall be conducted. Three (3) neutral density filters meeting the requirements of PS-1 shall be placed in the COMS light beam path. The monitor response shall be independently recorded from the COMS permanent data recorder. Make a total of five (5) nonconsecutive readings for each filter. The low-range, mid-range, and high-range calibration error results shall be computed as the mean difference and ninety-five percent (95%) confidence interval for the difference between the expected and the actual responses of the monitor as corrected to stack exit conditions. These values shall be calculated using the procedure of PS-1, Section 8.0. The following are requirements for these values:
 - (i) The calibration error test required the installation of an external calibration audit device (zero-jig). The zero-jig shall be adjusted to provide the same zero (0) response as the monitor's simulated zero (0).
 - (ii) Use calibration attenuators, that is, neutral density filters or screens, with values that have been determined according to PS-1, Section 7.1.3, "Attenuator Calibration", and produce simulated opacities (as corrected to stack exit conditions) in the ranges listed in Table 1-2 in PS-1.
 - (iii) The stability of the attenuator values shall be checked at least once per year according to the procedures specified in PS-1. The attenuators shall be recalibrated if the stability checks indicate a change of 2% opacity or greater.
- (4) The following are requirements for monitor acceptance criteria:
- (A) The following criteria are to be used for determining if the COMS audit results are acceptable:

Table 1 - Performance Audit Criteria	
Stack Exit Correlation Factor	? 2 percent
Zero and Upscale Responses	? 2 percent opacity
Zero Compensation	? 4 percent opacity
Optical Alignment	Misalignment error
	? 2 percent opacity
Optical Surface Dust Accumulation	? 4 percent opacity
Calibration Error	? 3 percent opacity
 - (B) The COMS is out of control whenever the results of a quarterly performance audit indicate noncompliance with any of the performance assessment criteria of Table 1 in clause (A). If the COMS is out of control, the owner or operator must take the action necessary to eliminate the problem. Following corrective action, the source owner or operator must reconduct the appropriate failed portion of the audit and other applicable portions to determine whether the COMS is operating properly and within specifications. The COMS owner or operator shall record both audit results showing

- the COMS to be out of control and the results following the corrective action. COMS data obtained during any out of control period may not be used for compliance determination; the data may be used for identifying periods where there has been a failure to meet quality assurance and control criteria.
- (C) Repeated audit failures, that is, out of control conditions resulting from the quarterly audits, indicate that the QC procedures are inadequate or the COMS is incapable of providing quality data. The source owner or operator shall increase the frequency of the above QC procedures until the performance criteria are maintained or modify or replace the COMS whenever two (2) consecutive quarters of unacceptable performance occur.
- (5) The performance audit calculations contained in PS-1, section 8 shall be followed.
- (e) Reporting requirements for performance audits are as follows:
- (1) Owners or operators of facilities required to conduct:
- (C) continuous opacity monitor calibration error audit;
- on continuous emission monitors shall prepare a written report of the results of the performance audit for each calendar quarter, or for other periods required by the department. Quarterly reports shall be submitted to the department within thirty (30) calendar days after the end of each quarter.
- (2) The performance audit report shall contain the following information:
- (A) Plant and monitor information, including the following:
- (i) The plant name and address.
 - (ii) The monitor brand, model, and serial number.
 - (iii) The monitor span.
 - (iv) The monitor location, for example, duct, boiler, unit, or stack designation.
- (B) Performance audit information, including the following:
- (i) The auditor's name.
 - (ii) A copy of the audit standard's certification, for example, the vendor's Protocol 1 certification, or neutral density filter certification.
 - (iii) All data used to calculate the audit results.
 - (iv) The audit results and an indication if the monitor passed or failed the audit. If the performance audit results show the CEMS or COMS to be out of control, the CEMS or COMS owner or operator must report both the audit results showing the CEMS or COMS to be out of control and the results of the audit following the corrective action showing the COMS to be operating within specification.
 - (v) Any corrective actions performed as the result of a failed audit.

Pursuant to 326 IAC 3-5-6(Record keeping requirements) the owner or operator shall meet the following:

- (a) On and after the certification of a monitoring system, the owner or operator of a source subject to this rule shall maintain records, including raw data, of all monitoring data and supporting information for a minimum of five (5) years from the date of the following:
- (1) A monitoring sample.
 - (2) A measurement.
 - (3) A test.
 - (4) A certification.
 - (5) A report.
 - (6) Any other activity required under this article.
- (b) The records described in subsection (a) shall include the following:
- (1) All documentation relating to:
 - (A) design, installation, and testing of all elements of the monitoring system; and
 - (B) required corrective action or compliance plan activities.
 - (2) All maintenance logs, calibration checks, and other required quality assurance activities.
 - (3) All records of corrective and preventive action.
 - (4) A log of plant operations, including the following:
 - (A) Date of facility downtime.
 - (B) Time of commencement and completion of each downtime.

- (C) reason for each downtime.
- (c) The owner or operator of a source subject to this rule shall maintain the records required by this section at the source, or at such other site, in a manner so that they may be inspected by the department or the US EPA, if so requested or required.

Pursuant to 326 IAC 3-5-7(Reporting requirements) the following reporting requirements apply to sources subject to this rule:

- (1) Sources subject to the requirements of section 1 of this rule shall report excess emissions no less frequently than quarterly. For sources required to report quarterly, such reports shall be:
 - (A) submitted by the facility owner or operator to the department; and
 - (B) postmarked or delivered by other means no later than thirty (30) calendar days following the last day of the reporting period.
- (4) The monitoring report shall contain the following continuous monitoring information summaries, with all times reported in real time.
 - (A) Monitored facility operation time during the reporting period:
 - (B) Excess emissions or parameters, as applicable, reported in units of the standard, or the applicable parameter unit as follows:
 - (i) Date of excess emissions, or other applicable dates.
 - (ii) Time of commencement and completion for each applicable parameter deviation or excess emission data.
 - (C) Magnitude of each excess emission as follows:
 - (i) For opacity as follows:
 - (AA) The actual percent opacity of all six (6) minute (block) averages exceeding the applicable opacity limit shall be reported. If the exceedance occurs continuously beyond one (1) six (6) minute period, the percent opacity for each six (6) minute average or the highest six (6) minute average opacity for the entire period shall be reported.
 - (BB) For department approved opacity averaging times other than six (6) minutes, the actual percent opacity of each averaging period in excess of the applicable limit shall be reported.
 - (CC) A summary by cause shall be prepared and submitted as part of this report itemizing exceedances by cause.
- (5) Continuous monitoring system instrument downtime except for zero (0) and span checks, which shall be reported separately, shall include the following:
 - (A) Date of downtime.
 - (B) Time of commencement.
 - (C) Duration of each downtime.
 - (D) Reasons for each downtime.
 - (E) Nature of systems repairs and adjustments.

The **Coal Sampling Procedures** have applicable compliance monitoring conditions as specified in 326 IAC 3-7 (listed below).

326 IAC 3-7-2 (Coal sampling and Analysis Procedures)

Pursuant to 326 IAC 3-7-2(b)(3) the coal sampling system shall meet the following minimum requirements.

- (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system.
- (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period.
- (C) Minimum sample size shall be five hundred (500) grams.
- (D) Samples shall be composited and analyzed at the end of each calendar month.

Pursuant to 326 IAC 3-7-2(c) coal samples shall be prepared for analysis in accordance with procedures

specified in ASTM D2013-86, "Standard Method of Preparing Coal Samples for Analysis". The preparation of samples shall meet the following requirements:

- (1) Samples shall be prepared in accordance with ASTM D2013-86, Procedure A or Procedure B.
- (2) Sample preparation shall be checked at weekly intervals by performing a split sample of the twenty four (24) hour composite sample and preparing and analyzing these two (2) identically.

Pursuant to 326 IAC 3-7-2(d) the heat content of coal samples shall be determined in accordance with procedures specified in ASTM D2015-95, "Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter", or ASTM D 3286-91A, "Standard Test Method for Gross Calorific Value of Coal and Coke by the Isothermal Jacket Bomb Calorimeter". Restandardization requirements in Section 11 of both methods shall be followed. Precision requirements for repeatability shall be verified according to Section 16.1.1 of both methods at a minimum of once per week.

Pursuant to 326 IAC 3-7-2(e) the sulfur content of coal samples shall be determined according to procedures specified in ASTM D3177-89, "Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke", or ASTM D4239-94, "Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods". Precision requirements for repeatability shall be verified according to ASTM D3177-89 Section 13, or ASTM D4239-94, Section 18, at a minimum of one (1) time per week. The laboratory that performs the analysis shall participate in an interlaboratory audit program using coal samples provided by the department.

Conclusion

The operation of this integrated, semi-chemical, pulp and paper mill shall be subject to the conditions of the attached proposed **Part 70 Permit No. T167-7358-00022**.